JKM LIBRARY
ND623.L5 S619
Siren, Osvald,
Leonardo da Vinci, the artist and the ma
3 9968 02661 3227

VIRGINIA LIBRARY

PRESBYTERIAN
THEOLOGICAL SEMINARY
CHICAGO

826 Belden Avenue

LEONARDO DA VINCI

Published on the Foundation
Established in Memory of
HERBERT A. SCHEFTEL
of the Class of 1898, Yale College

Leonardo, Portrait of Himself

Royal Library, Turin

LEONARDO
DA VINCI

THE ARTIST AND THE MAN

By

OSVALD SIRÉN

REVISED WITH THE AID OF
WILLIAM RANKIN AND OTHERS

NEW HAVEN
YALE UNIVERSITY PRESS
LONDON
HUMPHREY MILFORD
OXFORD UNIVERSITY PRESS
MDCCCCXVI

COPYRIGHT, 1916
By YALE UNIVERSITY PRESS

First printed, January, 1916, 1000 copies

YALE LIBRARY
OF
MEDICINE
HISTORICAL LIBRARY

623.L5
S 613

PREFACE

When we proceed to treat Leonardo as an artist, disregarding his activities in other spheres, we do so with a vivid sense of the limitations thus imposed upon the great subject, Leonardo da Vinci. Leonardo's painting and sculpture formed, in fact, only a part of his creative work, a fragment of that great soul's almost universal range of activity. Moreover, much that he has produced or has attempted to produce in these domains is now inaccessible to the investigator. Many of the paintings and sculptures which he planned were never executed, owing to external as well as internal causes; others were left half-finished; while of those actually consummated, no small portion has met with adverse fortune at the hands of time. Several of Leonardo's most important juvenile works mentioned by ancient authors seem to have entirely disappeared; the work of his manhood, the *Last Supper,* is hardly more than a shadow of what it once was, and the vast monumental composition of his ripe age, the *Battle of the Standard,* which indeed was only to a small extent executed in colour, is now known solely by preparatory studies and partial copies. The proud equestrian statue, which would doubtless have marked the culminating point within this domain of art had it ever assumed definitive form, survives only in drawings and free imitations. Of the vast architectural projects for central churches and mausoleums, as well as for palaces and even cities, not a single one was carried out.

Thus in studying Leonardo as an artist, we are often obliged to have resort to suggestions and reminiscences, preparatory studies and imitations, rather than to complete, original works of the master himself. The chief duty of the historian of art thus in many cases consists of a study of the preparatory drawings (and of the imitations), which may together serve to enlighten us as to the appearance and nature of the lost or unfinished work. It cannot be denied that this involves a regrettable limitation and a formidable obstacle to the popularization of Leonardo's works; the limitation is, however,

44446

not so great as many are disposed to assume. The preludes and impromptus of a great composer may contain all the beautiful motives of his completed symphonies, even if the instrumentation be poor and the execution perfunctory.

It is beyond the scope of the present study to mention all that Leonardo prepared and planned as an artist. We must confine ourselves mainly to paintings and sculptures which were executed wholly or in part, and to such drawings as were made in preparation for important works. It has not been my main object to explain and analyze everything; on the contrary, numbers of passages written with that purpose in the original manuscript have been excluded. I have chosen rather to direct attention and interest to Leonardo's chief qualities as an artist. Subjective hypotheses and questions of authenticity involving discussion of the pros and cons on certain moot points have been relegated to a subordinate place, and priority has been given to the study of the artist's mode of expression and to the course of his steady development in the light of his authentic works.

For this purpose it also seems that comparisons between Leonardo's works and earlier and later representations of similar subjects by other artists will not fail to be of value, since Leonardo's position in the history of art, and the epoch-making character of his contributions both in line and form can be realized most forcibly in the light of such comparison.

It may not be out of place to add that this book is more than a translation of my Swedish book on the same subject published in 1911. The material has been rearranged and some portions have been added, while others have been left out. It has seemed best to omit some purely historical parts and extracts from Leonardo's "Treatise on Painting," while greater emphasis has been laid upon æsthetic analysis. The volume will, therefore, have the value of a new point of view to those who are familiar with my Swedish volume. They will notice further that since its publication in 1911 I have modified some of my ideas regarding some of Leonardo's works. Should they recognize that many of my thoughts appear in a more vivid and striking form than before, that gain is chiefly to be ascribed to the collaboration of Mr. William Rankin, the distinguished American critic, who acted freely in reshaping my thoughts in English,

especially in the earlier chapters. But also other English and American friends have devoted much time and trouble to making something better than merely a correct translation of the original work. They do not wish to be mentioned, but I know that it is largely due to them if the book attains its object of awakening a broader interest among English and American readers for the great Florentine master, and I wish here once again to express to them my sincere thanks for their valued help.

I take this opportunity of acknowledging the courtesy of the delegates of the Clarendon Press and the visitors of the University galleries in granting permission for the reproduction of The Study of a Sleeve and A Battle by Raphael which appear in "Drawings from Old Masters" by Sir Sydney Colvin.

I also wish to acknowledge my indebtedness to Richter's well-known and indispensable book, "The Literary Works of Leonardo da Vinci," now out of print, from which several illustrations, especially among those of the equestrian statues, have been borrowed because they have not been otherwise available.

A few illustrations have been drawn from Berenson's "The Drawings of Florentine Painters" and from Müller-Walde's "Leonardo da Vinci." The majority of the illustrations, however, have been made from original photographs.

O. S.

CONTENTS

CHAPTER		PAGE
	Preface	v
I.	Introduction	1
II.	Biographical Notes	3
III.	Leonardo as an Apprentice in Verrocchio's Studio. His Youthful Works	10
IV.	Early Madonna Pictures and Drawings	29
V.	The Adoration of the Magi	40
VI.	Leonardo's Arrival in Milan. The Virgin of the Grotto	56
VII.	The Equestrian Statues. Decorative Paintings in Castello Sforzesco	69
VIII.	The Last Supper	90
IX.	Architectural and Scientific Occupations	120
X.	Leonardo's Return to Florence. The St. Anne	129
XI.	The Portraits	145
XII.	Studies of Plants and Animals. The Battle of the Standard	162
XIII.	The Leda Compositions. John the Baptist	184
XIV.	Leonardo in Rome and at Amboise	202
XV.	A Sketch of Leonardo's Personality, Character, and Views of Life	210

LIST OF ILLUSTRATIONS

Leonardo, Portrait of Himself . . . . . Frontispiece

Facing Page

View of Vinci from Southeast 4
View of Vinci and the House Which Is Said to Have Been Leonardo's Home 4
Verrocchio and Leonardo, The Baptism of Christ 14
Baldovinetti, Baptism of Christ 14
Lor. di Credi, Baptism of Christ 14
Verrocchio and Lor. di Credi, Altar Panel 14
Verrocchio's Workshop, Madonna and Saints 14
Verrocchio and Leonardo, Two Kneeling Angels from the Baptism . 16
Leonardo, Landscape Drawing, Dated 1473 18
Leonardo, Study of a Drapery on a Kneeling Figure . . . 18
Leonardo and Others, Annunciation 18
Baldovinetti, Annunciation 20
Fra Filippo Lippi, Annunciation 20
Lorenzo di Credi, Annunciation 20
The Reverse of the Female Portrait in the Lichtenstein Coll. . . 20
Leonardo, Study for the Angel's Sleeve 20
Leonardo, The Angel of the Annunciation 20
Verrocchio's Atelier, The Lady with Junipers 24
Florentine Master, Supposed Portrait of Ginevra Benci . . . 24
Lor. di Credi, Portrait of a Lady 24
Verrocchio, The Lady with the Primroses 24
Lor. di Credi, Portrait of a Lady 24
Verrocchio, The Putto with the Dolphin 26
Verrocchio, David (Detail) 26
Leonardo, Two Heads 26
Leonardo, Studies of Hands 26
Verrocchio (?), Madonna 28
Verrocchio (?), Madonna 28
Pseudo-Verrocchio, Madonna 28
Pseudo-Verrocchio, Madonna Study 28
Leonardo (?), Madonna, Statuette in Terra-Cotta 28
Leonardo, Madonna del Gatto Drawing 30
Sodoma, Madonna Painting 30
Leonardo, Madonna del Gatto 30

Facing Page

Leonardo, Madonna del Gatto 30
Leonardo, Studies of a Madonna with the Cat 30
Leonardo, Studies of the Christ Child with the Cat 32
Leonardo, Madonna del Fiore 32
Leonardo, Study for a Madonna with St. John 32
Leonardo, Madonna from the Adoration of the Magi 32
Leonardo, Madonna del Fiore 32
Leonardo, Madonna del Fiore 34
Lorenzo di Credi, Madonna 34
Flemish Master, Madonna. Copies from Leonardo 34
Florentine Master, Madonna with the Vase of Flowers . . . 34
Lorenzo di Credi, Madonna with the Vase of Flowers . . . 34
Leonardo, Madonna and Some Heads. Pen-Drawing . . . 36
Leonardo, Studies of Male and Female Heads in Profile . . . 36
Leonardo, Study of a Woman with a Child 38
Leonardo, A Woman with the Unicorn 38
Leonardo, Annunciation 38
Leonardo, Preparatory Drawing for the Adoration of the Magi . . 40
Leonardo, Drawings of Separate Figures for the Adoration of the Magi 40
Leonardo, Studies for the Adoration of the Magi 42
Leonardo, Study for the Background in the Adoration of the Magi . 42
Leonardo, Adoration of the Magi 44
Raphael, Heads from "The School of Athens" 44
Leonardo, Figures from the Adoration of the Magi 44
Leonardo, Some Heads from the Adoration of the Magi . . . 44
Botticelli, Adoration of the Magi (ca. 1468) 46
Botticelli, Adoration of the Magi (ca. 1477) 46
Fra Filippo Lippi, Adoration of the Magi 46
Botticelli, Adoration of the Magi (ca. 1476) 46
Botticelli, Adoration of the Magi (ca. 1480) 48
Botticelli, Adoration of the Magi (ca. 1483) 48
Filippino Lippi, Adoration of the Magi 48
Leonardo, Adoration of the Shepherd (Study for an Altar Piece) . 50
Leonardo, Study of Bernardo Bandini Hanging in the Gallows . . 50
Leonardo, S. Jerome Doing Penance 52
Lodovico il Moro 58
Beatrice d'Este, Wife of Lodovico il Moro 58
Leonardo, Drawings for War Machines 58
Leonardo, Drawing of a Gun Foundry 58
Leonardo, "La Vierge aux Rochers" 62
Leonardo, Head of "La Vierge aux Rochers" 64
Leonardo, Study for the Angel in "La Vierge aux Rochers" . . 64
The Angel and St. John, from "La Vierge aux Rochers" . . . 64
Leonardo, Study for the Kneeling Angel in "La Vierge aux Rochers" 64

Facing Page

Ambrogio Preda, "La Vierge aux Rochers" 64
Ambrogio Preda, Two Music Making Angels 64
Flemish Artist, XVI Century, Copy after "La Vierge aux Rochers" . 66
Follower of Leonardo, "La Vierge aux Balances" 66
Giovan Pedrino, Nativity of Christ 66
Lorenzo di Credi, Nativity of Christ 66
Leonardo, Study for "Madonna Litta" 68
Ambrogio Preda, Girl with Cherries 68
Leonardo and Pupil, "Madonna Litta" 68
Leonardo, Drawing for the Sforza Statue 68
Pollajuolo, Drawing for the Sforza Statue 68
Leonardo, Drawing for the Sforza Statue 68
Leonardo, Study for the Casting of the Horse 68
Equestrian Statue from the Sepulchral Monument of Paolo Savelli . 72
Donatello, Gattamelata's Statue 72
Small Bronze Horse, Suggested by Leonardo's Model . . . 72
Verrocchio, Colleoni's Statue 72
Leonardo, Studies after the "Regisole" Statue in Pavia . . . 76
Leonardo, Studies Partly Suggested by the "Regisole" . . . 76
Decoration of Branchwork in Sala delle Asse 78
Leonardo, Study for an Equestrian Monument (Trivulzio?) . . 82
Leonardo, Studies for the Trivulzio Monument 82
Leonardo, Study for the Trivulzio Monument 84
Leonardo, Marshal Trivulzio on Horseback 84
Leonardo, Study for an Equestrian Monument (Trivulzio?) . . 84
Small Bronze Statuette from the Beginning of the XVI Century, Suggested by Leonardo's Sketches 84
Paduan Artist, End of XV Century Bronze Statuette . . . 84
Paduan Artist, Beginning of XVI Century Bronze Statuette . . 84
Italian, Middle of XVI Century Bronze Statuette 86
North Italian Artist, Beginning of XVI Century Bronze Statuette . 86
Paduan Artist, End of XV Century Bronze Statuette . . . 86
Paduan Artist, End of XV Century Bronze Statuette . . . 86
Andrea Riccio, Bronze Statuette 88
Francesco Mocchi, Statue of Aless 88
Italian, Middle of XVI Century Bronze Statuette 88
Giovanni da Bologna, Statue of Cosimo I 88
Leonardo, Studies of Old Men. Pen-Drawing 90
Leonardo, Dancing Angels 90
Leonardo, Studies for a Last Supper 90
Leonardo, Studies of Discussing Men 92
Leonardo, Studies for a Last Supper 92
Leonardo, Drawing in Red Chalk for a Last Supper 94
Leonardo, Caricature-Head 96

Facing Page

Leonardo, Study of a Man's Head 96
Leonardo, Study for James the Elder 96
Leonardo, Study for Philip 96
The Refectory at Sta. Maria delle Grazie 98
Raphael Morghen, Engraving after Leonardo's Last Supper . . 98
Leonardo, The Last Supper and the Decoration above, in the Old Refectory of Sta. Maria delle Grazie 98
Leonardo, Last Supper 102
Head of Christ, Possibly by Leonardo 108
Head of Christ, After Leonardo 108
Leonardo, Study for the Head of Judas 108
The Head of Judas, After Leonardo 108
The Head of Peter, After Leonardo 110
The Head of John, After Leonardo 110
The Head of James the Minor, After Leonardo 110
The Head of Andrew, After Leonardo 110
Andrea Solario, Last Supper 112
Marco d'Oggiono, Last Supper 112
Marc Antonio Raimondi, Last Supper 112
Rembrandt, Last Supper 112
Taddeo Gaddi, Last Supper 114
Taddeo Gaddi, Last Supper 114
Andrea del Castagno, Last Supper 114
Cosimo Rosselli, Last Supper 116
Dom. Ghirlandajo, Last Supper 116
Umbrian Master, Beginning of XVI Century Last Supper . . 118
Andrea del Sarto, Last Supper 118
Leonardo, Drawing for a Central Church 120
Leonardo, Drawing for a Church, Suggesting Bramante's St. Peter . 120
Some Streets in Leonardo's City-Plan. Drawing in Manuscrit B . 122
Leonardo, Santa Anna Metterza. Cartoon 132
Italian, Beginning of XV Cent. Sta. Anna Metterza 132
Masaccio, Sta. Anna Metterza 132
Perugino, The Madonna and Her Relatives 132
Leonardo, Study for St. Anne 136
Leonardo, Study for St. Anne 136
Leonardo, Study for St. Anne 136
Leonardo, Study for St. Anne's Head 136
Leonardo, St. Anne with the Madonna (Unfinished) . . . 136
The Head of St. Anne 138
The Head of Mona Lisa 138
Leonardo, Study of Drapery for the St. Anne Picture . . . 138
Leonardo, Study of Drapery 138
B. Luini, St. Anne with the Holy Family 140

Facing Page

Copy after Leonardo's St. Anne 140
Lanino, St. Anne with the Madonna 140
Cesare da Sesto, Madonna with the Lamb 140
Raphael, Holy Family with the Lamb 142
Raphael, Madonna Canigiani 142
Fra Bartolommeo, St. Elisabeth with the Madonna 142
Michelangelo, The Holy Family 142
Boltraffio, Portrait of a Musician 146
Ambrogio Preda, Portrait of a Young Man 146
Boltraffio, Madonna, Saints and Donors 146
Boltraffio, Drawing of Heads 146
Cristoforo Romano, Portrait-Bust of Beatrice d'Este . . . 148
Ambrogio Preda, Portrait of Beatrice d'Este (?) 148
Boltraffio, The Lady with the Weasel 148
Leonardo's Workshop, La Belle Ferronière 148
Leonardo, Female Portrait. Pen-Drawing 148
Leonardo, Study of a Condottiere 148
Leonardo, Portrait of Isabella d'Este 148
Pollajuolo (?), Female Portrait 148
Piero di Cosimo, Idealized Portrait 152
Piero di Cosimo, Portrait of a Lady Reading 152
Desiderio, Bust of a Young Lady 152
Mino da Fiesole, Bust of a Young Lady 152
Leonardo, Portrait of Mona Lisa del Giocondo 156
Contemporary Copy after Leonardo's Mona Lisa 160
Raphael, Drawing for the Portrait of Maddalena Doni . . . 160
Follower of Leonardo, Study after Mona Lisa 160
Follower of Leonardo, Free Copy of Mona Lisa 160
Raphael, Baldassare Castiglione 160
Andrea Solario, Charles d'Amboise 160
Titian, François I 160
Alessandro Allori, Giuliano de Medici 160
Leonardo, Drawing of a Beetle 162
Leonardo, Studies of Flowers 162
Leonardo, Studies of Horses and Riders 164
Fighting Riders, from the Background of the Adoration of the Magi . 166
Leonardo, Study of Charging Riders 166
Leonardo, Study for the Battle of the Standard 170
Cesare da Sesto (?), Drawing after Leonardo's Cartoon for the Battle of the Standard 170
Leonardo, Studies for the Battle of the Standard 172
Leonardo, Study for the Battle of the Standard 172
Leonardo, Study for a Warrior in the Battle of the Standard . . 174
Leonardo, Study for Another Warrior in the Same Picture . . 174

Facing Page

Giovan Francesco Rustici, John the Baptist between the Levite and Pharisee 174
Leonardo, Studies for the Battle of the Standard 174
Rubens, Drawing after Leonardo's Cartoon for the Battle of the Standard 174
Leonardo, Studies of Men and Riders 176
Paolo Uccello, Battle Scene 176
Piero dei Franceschi, Battle between Heraclius and Cosroes . . 176
Leonardo, Drawing of a Tree 178
Michelangelo, Fighting Men on Horseback 178
Raphael, Sketch after Leonardo's Battle of the Standard . . . 178
Michelangelo, Man on Horseback 178
Leonardo, Neptune Driving His Team. Red-Chalk Drawing . . 184
Leonardo, Studies for the Head of Leda 184
Leonardo, Study for a Kneeling Leda 184
Raphael, Drawing after Leonardo's Leda 184
Florentine Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda 186
Milanese Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda 188
Flemish Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda 188
Venetian Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda 190
North Italian Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda 190
Franciabigio, Leda with Her Children 190
Leonardo, Study for a Kneeling Leda 192
Leonardo, Study for a Kneeling Leda 192
Giovan Pedrino, Kneeling Leda 194
Giovan Pedrino, Abbondanza 194
Giovan Pedrino, Mary Magdalen 194
Francesco Melzi (?), Vertumnus and Pomona 194
Cesare da Sesto, John the Baptist in the Disguise of Bacchus . . 196
Salaino (?), John the Baptist 196
Bern. Lanino, John the Baptist 196
Milanese Artist, Beginning of XVI Century, John the Baptist . . 196
Imitation after a Cartoon by Leonardo, Representing an Angel Pointing Upwards 196
Leonardo, John the Baptist 198
Leonardo, Schematic Drawing of a Man of Perfect Proportions . . 210

LEONARDO DA VINCI

I

INTRODUCTION

Leonardo was a son of Etruscan soil,—a scion of that Tuscan race which during its palmy days attained in various forms of art to purest expression of concentrated will, keen eye, and brawny hand. These later Etruscans never primarily sought for beauty and harmony. Their art is all-compelling in its character, full of stirring movement, intensely realistic,—alive to the very finger-tips.

No people in Italy has produced such good realistic narrators as those of Florence; no artists have interpreted reality with such deep, true feeling for what is characteristic and valuable as the Florentines. Sharpness of expression and energy of movement are developed to their highest pitch in artists such as Donatello, Andrea del Castagno, and Antonio Pollajuolo. Heroic poetry and dramatic sense of life have never been foreign to the genius nurtured in the city of Dante.

The true spiritual power of the Florentine has always resided in his will and his constructive imagination. He builds in thought, he fashions his ideas plastically. There is an uncompromising sharpness in his view of life which requires, not the garb of colour tremulous with melting light and with shadows toning down the contrasts, but the clearly defined form, the pure line. Florence has never produced a real *painter,* in the strictest sense of the word. She has seen the rise of many great artists working with the brush, but these have been draughtsmen rather than painters, whose chief task has been the decoration of large mural surfaces, where drawing has played the prominent rôle. The drawing-pen, the modeller's stick, the carver's chisel, the casting-mould, and the chasing-tool, are the implements with which the Florentines attained this foremost position in the whole field of Renaissance Art.

Leonardo too was a born draughtsman, to whom the drawing-pen was a far more natural instrument of expression than the brush.

Indeed, many of his compositions have remained drawings and many of his experiments in colour were so disastrously immature as to prove the ruin of the work. Furthermore, had the whole sum of his life's achievement come down to us intact, a by no means inconsiderable portion of it would doubtless have consisted of plastic works and preparations for them. Certainly at the outset the sculptor in him was quite as much in evidence as the painter. He was a Florentine to the backbone even in his earliest works, though more alert, supple, and intelligent than any of his predecessors. Later on his interest in pictorial problems gained in strength as his scientific interests deepened, causing tendencies and features of style in his art productions appearing in none of those of his contemporaries. This transition, from sharply defined details and contours towards melting chiaroscuro and picturesque *sfumato,* reflects the general tenor of the progress of Renaissance Art, but what in the usual course of its development required two or three generations to accomplish, matured in Leonardo within the space of two or three decades. No artist has appropriated inherited forms of expression and created new ones more rapidly, none has more thoroughly compelled the form to serve as the living vehicle of his artistic idea. In this development, too, we may trace an aspect of the strong-willed Florentine character in his never resting endeavour to seize the salient points and characteristic features. The key-note of Leonardo's art remains Florentine even though he attained a unison and harmony of beauty richer than any which had previously been achieved in Florentine Art.

II

BIOGRAPHICAL NOTES

Leonardo, or Lionardo as he is generally called by earlier Florentine writers, was born in 1452 in the neighbourhood of the little mountain village of Vinci, a few miles from Empoli. His father, whose name was Piero d'Antonio, followed the profession of his sire and grandsire, that of notary, though he does not seem to have held any office up to the time when his firstborn son came into the world. He was then barely more than a youth,—twenty-five years of age, residing in his ancestral home at Vinci. Leonardo's mother was a woman by the name of Catarina, of whom we know nothing except that she was "*di bon sangue.*" She seems to have had little opportunity to influence her son's development for, the grandfather disapproving of the young Piero's *liaison* as unworthy of his rank, Catarina, soon after the birth of the boy, was married to a peasant at Vinci, while Ser Piero, in his turn, wedded a lady of noble birth, Albiera Amadori.

The little Leonardo was received into his father's home, which was probably the same house where the family had lived for generations. Whether this was identical with the plain stone building on the slope between Vinci and Anchiano which an inscription plate designates as the house where Leonardo was born, I will leave to others to determine. In any case, the district is that in which Leonardo passed his childhood. A beautiful and fertile district it is indeed, situated half-way up the slope of Monte Albano. As far as the gaze reaches, the silver-gray olives spread their soft carpet over the hills, and between them the vines gleam forth when autumn is approaching and the grapes are taking on a blue tinge. Long, undulating contours bound the horizon as though the district had been modelled by some mighty artist's hand,—solemn and monumental yet without a trace of bleakness. Round the thinly scattered houses stand orange and fig trees, bowed down with fruit, and corn

to be harvested in abundance. The air is pure and fresh up there even in late summer and the people are cheerful and straightforward. They lead a simple, strenuous life, in constant co-operation with the bounteous nature in the midst of which they live, but to this day there dwell in their memories strange legends which have doubtless fascinated many an imaginative boy.

Such were the surroundings in which the little Leonardo grew up. The beauty of the soil and the light of the lofty skies were probably sources of greater delight to him than the human beings with whom he was thrown in contact. His stepmother died early and was succeeded by another who was even less capable of cherishing interest for the illegitimate child. He found little happiness at home, and, according to tradition, resorted for companionship to his grandfather, his "nonno." In the course of the father's third and fourth marriages the family circle (now removed to Florence) rapidly increased, making life at home almost unendurable to Leonardo. His step-brothers and sisters and even his father seem always to have regarded him as "the illegitimate one," a kind of intruder, against whom they might freely vent their petty spite and bitterness. In fact, later on they did not even hesitate to bring an action against the famous artist for venturing to accept a small inheritance from his uncle.

These impressions of childhood cannot fail to have influenced Leonardo's future development. His mind was more sensitive, more impressionable, than that of the majority, and he was destined from early years to experience more suffering than joy from contact with the outer world. He gradually learned to retire more and more within himself in order to escape being wounded and abused. The warm affection, the tender cherishing solicitude which may help a sensitive child-soul to unfold, did not fall to the lot of the little Leonardo.

In the year 1469 we find the family settled in Florence, where Ser Piero had become "procuratore" to the monastery of SS. Annunziata and notary to the Florentine Signoria (the city magistracy). His reputation as a lawyer increased rapidly and his income kept pace with it. In course of time Ser Piero became one of the most fashionable lawyers of Florence. He gave his children the usual education, and Leonardo, with the others, was sent to the "scuola

View of Vinci from Southeast

View of Vinci and the House Which is Said to Have Been Leonardo's Home

dell'abbaco," the primary grammar school, where the instruction, intended as a preparation for the mercantile profession, consisted chiefly of a course in arithmetic, while the humanities and classical languages were almost neglected. Perhaps for this reason Leonardo appears never to have devoted himself with any great interest to the study of the ancient writers or their modern imitators; on the contrary, he seems to have carried away a certain contempt for book-learning. Observation and experience were his real teachers, and it is almost with an undercurrent of satisfaction that he thenceforward styled himself "uomo senza lettere." Yet he was less the mere empiric than he supposed.

The city in which the young Leonardo's lot was now cast, and where he received his artistic training, was in many respects a contrast to the quiet, lonely region in which he had passed his childhood. Florence was already at that time a city of stone, with narrow winding streets where footsteps echo hard and sharp between the obtrusive palace walls, and where only the walls and the roofs afford shade. Life here was bound to assume something of the uncompromising hardness and angularity of the stones, especially when we reflect that in democratic Florence everyone was his own master, and that each man had to look to his own fist and sharp tongue to vindicate his rights.

Let us for a moment climb in fancy one of those towers, still existing at the present day, though erected during the Middle Ages as a necessary defence in the midst of continually recurring feuds. Thence let us gaze out over the surrounding country. On three sides the eye encounters high crests of hills, standing out sharply in long uniform lines against the clear sky, with nothing to round off or soften the severe plastic forms. During the greater part of the year the atmosphere is transparent. The vegetation of the slopes consists merely of the silver-gray mantle of the olives, while upon the crest of the hills hardly a tree is seen so that these gigantic formations stand out in sharp relief.

It is but natural then that the strongest and hardiest generation which grew up in Florence should have something of this plastic character moulded into its inner being. Its imagination was to a great extent nourished by impressions which took shape in stone, its view ever bounded by bold outlines. To the Florentines of the

fifteenth century stone- and marble-work were what flowers and gardening were to the seventeenth-century men of Haarlem.

Nevertheless it was *La Citta dei fiori!* For beauty had ever its abode here though its gentler, more delicate, flower-like forms were concealed behind the thick palace walls. Outwardly it presented only a harsh and manly face, and it was this latter aspect which asserted itself during the years of the early Florentine Renaissance,—years of struggle and stress and yet of abounding joy. Thus was it expounded by Leonardo's teachers and predecessors. It was reserved for the following generation to interpret the softer, feminine beauty. In Leonardo's art both these aspects of human beauty attain their consummation.

* * * *

Authentic information in regard to Leonardo's youth and earliest artistic training is extremely scarce. Besides the meagre facts to be gleaned from a couple of Ser Piero's taxation returns, we have practically only Vasari's account to build on. This account may be exaggerated, but in its main features seems to reflect the opinion formed of Leonardo by his contemporaries; for Vasari obtained his data from artists who had known Leonardo personally, and had worked in the afterglow of the great master's achievements. If we strip his account of the legendary halo which invests it, there still remains a core worth preserving as a good summary of several characteristic aspects of Leonardo's complex nature. Vasari, for instance, writes:

> Marvellous and celestial was in truth Leonardo, Ser Piero da Vinci's son. He would have made great proficiency in learning and in the elements of science had he not been so many-sided and unstable. He set himself to learn many things and, having begun them, abandoned them. Thus, in the course of a few months he made such progress in arithmetic that he often confused his teacher by the objections and doubts which he was continually bringing forward. He applied himself a little to music and presently made up his mind to learn to play the lyre, and being endowed by nature with a sublime soul and great charm, he sang on it in his heavenly way his improvised songs. In spite of his multifarious activities he never entirely laid aside drawing and modelling,—pursuits which captivated his fancy beyond all others. When Ser Piero perceived this and considered the brilliance of his gifts, he one day took one of his drawings to Andrea del Verrocchio, with whom he was on terms of great friendship, and besought him urgently to tell him whether Leonardo would be likely to achieve success in case he devoted himself to Art. Andrea was amazed when he saw Leonardo's extraordinary beginning and

encouraged Ser Piero to let him continue. The latter then arranged for him to visit Andrea's workshop, which he did not need any persuasion to do, and he practised not merely one, but all the arts which are founded on drawing. He possessed such divine and marvellous gifts, being also an excellent geometrician, that he worked not merely in sculpture,—modelling in clay smiling women's heads, from which plaster casts are still taken, and boys' heads which seem to have proceeded from the hand of a master,—but also made numerous architectural drawings, both ground-plans and façades; he was also the first—though but a youth—to bring forward the proposal for making the Arno navigable from Florence to Pisa. He made drawings of flour-mills, fulling-mills and other works which can be driven by water-power; however, as he wished in the first place to make painting his profession, he drew much from nature, occasionally making models of the human form in clay. These he covered with pieces of soft cloth dipped in plaster, and then set himself to reproducing them with the greatest care on a very fine kind of Reims cloth or prepared linen. These he executed in black and white with a sharp-pointed brush with marvellous dexterity, as is attested by some studies from his hand in my collection of drawings. Moreover, he drew on paper with such care and skill that no one equalled him in perfection of finish; I possess, for instance, a head drawn by him with silver point in chiaroscuro which is quite divine.

We have no positive knowledge as to the exact year in which Leonardo entered Andrea del Verrocchio's studio, but the date should probably be put between 1466 and 1469. Florentine boys were usually put to some trade when they had reached the age of fourteen. Leonardo was doubtless not kept at home longer than was customary. He remained with Verrocchio almost ten years (at any rate until 1476). During this time he enjoyed the best possible opportunity of familiarizing himself thoroughly with all the different aspects of the artistic work of those days. Verrocchio was not merely a sculptor but also a goldsmith, a wood-inlayer, a master of perspective, and a musician. However, what Leonardo learned from Verrocchio was not limited to technical and practical accomplishments; he obtained also support and guidance in his scientific researches from that experienced and discerning artist. Moreover, in Verrocchio's studio he was introduced to the society of the most eminent contemporary artists. Not merely young men such as Lorenzo di Credi, Francesco Botticini, and Francesco di Simone, but older and more independent painters, such as Botticelli and Perugino, appear to have periodically lent their assistance to the heavily taxed master. Verrocchio's studio formed, in fact, the rallying-point of the Florentine artistic world of those days. Near neighbours to Verrocchio were the brothers Pollajuolo, who also exercised an important influence on Leonardo's development.

But Leonardo evidently did not approve of all that he saw and heard in the studio. Even in his later Milanese period, when writing down his precepts for painting, he takes his stand against certain theories enunciated by Botticelli, and in more than one instance he maintains an opinion in the face of the latter. There is reason to believe that the discussions which took place in the humble workshop in the Via dell'Agnolo were often rather heated.

At the age of twenty he became a member of the Compania di San Luca. His name occurs in the account book of this Society of Artists, the so-called Libro Rosso (in the National Library at Florence), for the year 1472, with an entry indicating that he had neglected to pay his member's fee. The fact is worth noting, particularly as it shows that the pronounced religious character of the Society did not deter Leonardo from applying for membership.

Leonardo plainly was not one of those who were influenced by the religious fanaticism which at that time was excited in so many sensitive minds by the passionate preacher of San Marco. Leonardo's clear intellect, sane judgment, and habitual balance of mind preserved him from those violent plunges which occur in the lives of Botticelli, Fra Bartolommeo, and the young Michelangelo, not to speak of several minor artists who, for longer or shorter periods, were numbered among Savonarola's adherents. Leonardo's independent attitude toward all kinds of pietistic and dogmatic religious zeal is illustrated by the following lines from the "Treatise on Painting":

> . . . On such as abuse those who draw on Holy days and examine the works of God. . . . Fools, deceiving themselves and others, are those who blame the painters for studying on Holy days such things as appertain to the true knowledge of nature. . . . These fault-finders should rather keep silence, for it is by such study that one learns to know the master-artificer of so many marvellous things; this is the way to learn to love the great Inventor. . . . Great love comes only from knowledge of things; without knowledge true love is impossible.

While Leonardo was working in Verrocchio's studio, accusations of sodomy were levelled against him. There existed at this time in Florence an institution called "Uffiziali di notte e dei monasteri," whose mission was to look after the morals of the community and of the religious societies in particular. As an aid in this purpose they had, among other devices, set up on the Palazzo della Signoria a

kind of letter-boxes called *tamburini,* in which anyone could drop anonymous accusations (*tamburationi*) without the slightest responsibility or obligation to bring forward evidence in support of the accusation. On the 8th of April, 1476, Leonardo's name occurs, together with those of some other artists, in one of these *tamburationi.* They were all accused of sodomy. However, upon trial they were acquitted on condition that they should appear at a fresh trial in case the accusation were renewed. This actually happened two months later, but the new hearing yielded quite as meagre result. There is thus no means of ascertaining whether any truth lay at the bottom of this anonymous indictment. The majority of critics leans to the belief that the accusation was simply an exhibition of envy and spite against Leonardo who was beginning to be a recognized force in the world of art.

Vasari's statements that Leonardo in his youth devoted himself particularly to sculpture, and executed busts of smiling women's and boys' heads have not yet been confirmed by historical investigation. Have all these busts been lost, or are they hiding behind anonymous works of the school of Verrocchio and Desiderio? The question might well repay more thorough special research than has hitherto been accorded to it. This subject will receive further comment in connection with the discussion of the work executed by Leonardo in Verrocchio's bottega.

The project for making the Arno navigable from Florence to Pisa, which Vasari mentioned in the passage cited above, was put forward by Leonardo quite seriously, though not till his return to Florence in 1500. From early youth his interest was manifest in the construction of waterways and in the utilization of water-power for industrial purposes, and this side of his activity was perhaps appreciated more than any other by his own generation. In fact, Leonardo's inventive powers and extraordinary mechanical skill seem to have been most instrumental in investing him with that halo of half-supernatural ability which so dazzled his contemporaries.

III

LEONARDO AS AN APPRENTICE IN VERROCCHIO'S STUDIO. HIS YOUTHFUL WORKS

The closest personal tie of Leonardo's early years must have been that of loyalty to his teacher in art, Andrea del Verrocchio. Would that we knew more of the actual details of this extraordinary apprenticeship! But we must be content with a few hints from documents and legitimate inferences from their internal evidence. Leonardo's loyalty is shown in the entire absence from his mind of the eclectic spirit, for there was no lack of other studios, with other ideals and practices, and the works of great early masters were accessible for study and copy. We need only compare him with the Umbrian Raphael, who a generation later assimilated Florentine form from every source, to realize how true Leonardo was to the system of his master and to his immediate duties as pupil and helper in Verrocchio's bottega. And, indeed, it is impossible to overestimate the debt he owed to Verrocchio. Even his most pregnant ideas do not absolutely break with the school tradition. The bare fact that his early efforts are discovered by acute and scholarly critics as glosses on his master's art, that we cannot always distinguish work of teacher from that of scholar, is in itself an indication of the closeness of the relation.

It is important, therefore, to consider this apprenticeship with all due care, for there can be no question, whatever may be the obscurity of certain problems concerning it, that Verrocchio's influence upon the young man was at once his most helpful inspiration and the controlling impulse toward sound practice. Leonardo was, in a way, a dreamer. Nothing could have been a better foil to his half-romantic temperament than the robust and steadily poised character of his teacher with its sharply realistic and analytical vision and its thoroughness of method. As regards the merely technical factor in painting we have less certain criteria.

Technique, however, is less of a consideration in the work both of Leonardo and his master—and, indeed, in that of Raphael and of Michelangelo—than the ideals of drawing, of modelling, of formal composition in line and plane, and the general conception of representation which belonged to the best Florentine practice. None of these was primarily concerned with representative colour or even with the expressive character of handling *per se*. The human figure —especially at this time the nude figure—was the unit and basis of form in Florentine art both in sculpture and painting, as it was in Greek and Græco-Roman art, upon which Florentine style was mainly based. Verrocchio was the chief Florentine sculptor of the period and skilled in the details of almost every craft. He was also a bronze worker, goldsmith, wood-inlayer, builder, and painter. In the latter field he was aided by a thorough knowledge of anatomy and perspective.

While we cannot point to any paintings certainly known to be by his own hand, we do know that he was at least a great *entrepreneur* in the art. We may therefore judge him fairly, without reference to his individual execution, by the mass of work which is accredited to his bottega by consensus of expert authority.

This body of work, together with a few remarkable drawings more or less satisfactorily authenticated, confirms the impression made by his well-known sculpture. But while the impress of his personality and the broad characteristics of his style may be seen in everything coming out of his studio, we find a varying capacity for execution evidenced by the individual pupils. Among these productions, as we shall see, there are clear traces of the only highly gifted pupil,—namely, Leonardo himself.

A problem in comparative style is thus established in which Verrocchio's known art is the point of departure, and the discovery of Leonardo's earliest essays in close relation to it the chief goal. It will help us if we attack this problem first in the broadest aspect, that is, in its bearing upon Florentine ideals of form as a whole.

Verrocchio's special and particular virtue is well expressed in his name (which means "true-eye"), and is strongly contrasted with that of his greatest predecessor in Florentine sculpture, Donatello. A "true-eye" with respect to an object and to the form in which to express it may be invaluable for discipline and yet be lacking in

breadth of vision and constructive imagination. This is precisely the difference between Verrochio and Donatello, between a dominantly naturalistic and individual analysis of form, and a more synthetic and typical design based upon antique style. The contrast is still greater when comparing Donatello with Pollajuolo, who taught Verrocchio and all his most intelligent contemporaries how to study nature. Indeed, it may be traced in the whole tissue of Florentine form as the essential division between the perceptual or naturalistic, and the conceptual or generalized and traditional factors in representation. To realize the more searching and scientific but less monumental and universal ideal in Leonardo's immediate *milieu,* we need but to recall Donatello's Bronze David,—a descendant of the Hermes or Eros of Praxiteles,—his Olympian *Gattamelata,* and his Paduan *Madonna,* in the type of an ancient goddess, a Hero or a Demeter rather than of a pitiful Christian mother, and then turn to Verrocchio's vivid presentations of the actual bodily characteristics of the objective model.

This new Florentine naturalism in sculpture and drawing, based upon the exact study of bodily structure, was first practised in a thoroughgoing way by Antonio Pollajuolo. To cite Vasari: "He understood the nude in a more modern way than any of the masters before him, and removed the skin from many corpses to see the anatomy beneath; he was the first to study the play of the muscles and their form and order in the body." And in Pollajuolo, indeed, abundant fruits of these studies appear. No artist has conceived his figures with greater energy of line, more concentrated force in action, more nervous tension in the muscles. His naked giants seem less like mobile bodies than like flashes of lambent flame consuming the form. In this power of expressing movement Pollajuolo exerted direct influence upon Leonardo.

Verrocchio's temperament is less sanguine and volatile than Pollajuolo's; his analysis less sheerly kinetic. The bony structure of his adolescent *David,* the mass and weight of movement in the Colleoni horse, the tense, even constrained pose of the Baptist figure in the *Baptism of Christ,* illustrate a sobriety and reticence which we miss in Pollajuolo's form, but which was to steady Leonardo's. At the same time his art searches out nature and yields to none in its vigorous, incisive, concentrated energy. The naturalism of the

horse in the Colleoni statue was in fact criticised by his contemporaries for its literal translation of the anatomy of the animal as seen dissected, and much the same limitation of vision has spoiled for many spectators certain of Verrocchio's otherwise magnificent human figures. Animal life, motives, things mobile or elastic, employed in decorative detail, like the spiny acanthus leaves of the Medici sarcophagus, are charged with an individual touch and a fresh nervous force. They are in no direct relation to any classical prototypes and strongly contrast with the feebler but more idyllic and graceful plastic motives, whether of classical or of naturalistic inspiration, which we find in the school of Donatello and the works of Desiderio and the della Robbias.

Verrocchio's frank return to nature, his superbly forceful, purposeful, and disciplined energy, and his complete mastery of all mediums of expression, are responsible in far greater degree than any pronounced originality of thought or invention for Verrocchio's pre-eminence as a leader.

No master artist of the age was better fitted to teach Leonardo and no pupil better fitted to profit by the instruction. For Leonardo was likewise a confirmed naturalist, although he never allowed the "casual dictation" of phenomena to emasculate his creative imagination. Leonardo also possessed a sanguine temperament, a perseverance which no difficulty could discourage, and no demand for effort or study deter. Upon his teacher's art, with the added gift of his own extraordinary mentality, the pupil erected the first complete formal edifice of modern style in painting,—the first organic synthesis of the traditional and contemporary elements in graphic expression, the first mature and entirely articulate pictorial utterance of the High Renaissance.

* * * *

Vasari has bequeathed to us the tradition of a studio-work in the construction of which Leonardo took active part. He writes: "Leonardo was then placed, as has been said, at the instance of Ser Piero, to learn art with Andrea del Verrocchio. The latter was engaged on a picture of St. John baptizing Christ and Leonardo painted here an angel holding some garments. Although he was but a lad he executed this angel in such a manner that it was much more beautiful than

Andrea's figures. This was the reason why Andrea would never again touch the colours; for it seemed to him derogatory to be excelled by a mere child."

This statement of Vasari's is not of his invention, for it is found in Francesco Albertini's "Memoriale" (printed in 1510), and thus goes back to Leonardo's own time. It is repeated with such unanimity by early writers that the burden of proof lies with those who deny its truth. Yet our acceptance or rejection of this traditional authority must ultimately depend upon the testimony of the work itself. But neither the authenticity of the picture as of Verrocchio's conception, general design and supervision, nor its historic importance is questioned. The *Baptism of Christ* is not, indeed, taken as a whole, one of the most attractive examples of the quattrocento. A certain indecision and stiffness manifested in the principal figures indicate clearly that the work belongs to a comparatively early period in Verrocchio's career,—in our opinion to about the year 1470, or even a little earlier. Later on the master's creations assume more of energy and assurance.

The composition follows, in the main, the ancient Florentine scheme. We find its immediate prototype in the little *Baptism* in the Florence Academy, formerly attributed to Fra Angelico, but now with good reason reckoned among the youthful essays of Verrocchio's teacher in painting, Alessio Baldovinetti,—himself a link in style, through Domenico Veneziano, with Masaccio, and in certain naïve ideals of art even in touch with the mediæval masters.

It is worth while to observe the contrast between Verrocchio's harsh but vigorous realism and the gentle art of Baldovinetti. In the figure of St. John we have the same pose in both pictures, but Baldovinetti aims at a total effect, a formal impression, while with Verrocchio the naturalistic method has introduced an extreme of specific elaboration so that the figure with its gaunt and gnarled structure and articulation, its sinewy limbs, protruding cheek bones, and veined, distended hands, becomes almost a literal transcription of the living model. The execution, in meticulous tempera hatching with a pointed brush, heightens a rather bald and unpleasing impression.

The Christ figure is less forbidding and ascetic—of less plebeian and meagre build. It is indeed a normal man of flesh and blood, with

Verrocchio and Leonardo, The Baptism of Christ

Academy, Florence

Baldovinetti, Baptism of Christ
Academy, Florence

Lor. di Credi, Baptism of Christ
S. Domenico, Fiesole

Verrocchio and Lor. di Credi,
Altar Panel
Duomo, Pistoja

Verrocchio's Workshop,
Madonna and Saints
Budapest

coherently, even beautifully, drawn and modelled limbs and features. His feet, indeed, may not plant themselves quite firmly on the Jordan bottom, but colours in this passage have changed, and planes are no longer clearly marked. The sentient, expectant, submissive attitude may also give us a first impression of some indecision in form, but the figure as a whole is a highly notable achievement in its solution of the problem of the nude. We may perhaps turn willingly from the ascetic countenance and bearing to the body itself, with its firm delineation, its consistent and delicate modelling, its fine development of surfaces in light and shadow, the actual painter's craft in a flowing medium and complex colour, treated with oil as an essential vehicle. We remark here a style distinct from the arid, parchment-like figure of the Baptist, with its thin staining of tempera in scattered strokes.

The same difference in technical execution is observable in the angels, the background head in three-quarters, with a stubby nose, being in tempera, while the head of the angel in the foreground,—a sharply cut, regular, lovely profile turned towards the spectator,—is, at least in part, in an oil vehicle. The fused modelling of the lights here corresponds with that of the Christ figure, the colour being worked into the surface texture in a fashion quite other than that of the flesh-tones of the background angel. But of course the difference in execution is only complementary to the still more marked difference in design. Whereas the angel in the background is a somewhat heavy and motionless shape, the one in front gives the impression of animated movement and psychic tension. This is the only figure in the whole picture which looks inspired.

The two angels, taken together as a group supporting the Christ and counterbalancing the action of the Baptist, are harmonious with one another and with the central figure. They have none of the uneasy, strained effect of the Baptist motive, which seems almost isolated in the ensemble and even suggests an interruption or alteration in the design during the progress of the work on the two larger figures. That is to say that Leonardo, if engaged at all upon the picture, may have done his part somewhat later than the date of the original design and laying in.

If we assume, in accordance with the extremely probable tradition, that Leonardo painted the angel seen in profile, it seems to us that we are also warranted in attributing to him some share in the

actual painting of the Christ. Both these figures, as we have said, are executed in oil tempera, which is not the case (at any rate, not in the same degree) with the other figures. While it is not unusual in Florentine pictures of the latter half of the fifteenth century to find oil colours and tempera used simultaneously,—the former for the stuffs, the latter in the nudes,—the different media used alongside of one another in this picture indicate the work of two different hands. We should also recall Vasari's statement that Leonardo excelled his teacher in technical capacity as a painter,—and this was doubtless due to his use of better means, capable of rendering finer nuances than Verrocchio could, who was more bound by earlier methods and traditions. This by no means implies that Leonardo executed the whole Christ independently. The drawing and modelling are purely Verrocchiesque, and the same broad, somewhat rustic type exhibited by this Christ recurs in several of Verrocchio's painted and sculptured figures. It belongs to the same artistic class as the countenance of the angel in full face. In fact, there exists in the Uffizi a study of Verrocchio's for this curly-headed angel.

In immediate connection with the kneeling angel in the *Baptism* there should be mentioned two studies of drapery belonging to the collections in the Louvre and in the Uffizi. Both of them represent a mantle falling in rather rich and sharp folds over the rear portion of a kneeling youthful figure. They are executed with a brush and umber on fine linen, the ground color being painted in green, and heightened with white. The connection with the angel in profile seems close; like the painting the drawings give us much of the actual character of the stuff; the thin but rather stiff quality of the cloth, which is brought out by the sharp creases of the folds, by their graceful fall over the loin and leg, and their fan-shaped expansion on the ground. This close and minute treatment of the folds is essentially different from the heavier and fuller treatment which we find in Verrocchio's style,—in typical atelier paintings and in drawings,—nor do we come across anything like it in any other contemporary master. Di Credi's puffy treatment of drapery is characteristic of the method which predominated in Verrocchio's bottega. Moreover, in some later Leonardos, as the *Annunciation* in the Louvre and the *Adoration of the Magi,* we can still observe a similar though softer style of drapery, and the same spreading out of the mantle on the

Verrocchio and Leonardo, Two Kneeling Angels from the Baptism

Academy, Florence

ground. As a transition from these still rather hard and stiff drapery studies to Leonardo's more natural treatment attention should be called to a large drawing in the Louvre, the lower part of a seated female figure executed in the same technique and on the same kind of fine linen as those mentioned above. In fact, Vasari in all probability is referring to brush-sketches of this kind in the above-quoted passage on Leonardo's earliest drapery studies.

Thus we find every reason to adhere to the traditional statement as to Leonardo's collaboration in the production of the angel in the foreground of the *Baptism,* which not merely in its general style, type, and treatment of the folds of drapery, but in actual execution essentially differs from its companion. As a little adjunct, characteristic of the young Leonardo, we may also mention the ribbon set with large glass beads which runs over the angel's shoulder.

Passing now from the figure and the rather conventionally handled foreground to the landscape setting, we find ourselves in a new world, quite strange, indeed, to our experience of earlier Florentine painting. Its yellow-brownish colour-tone,—which on close examination one sees to have been added to a simpler tempera underground,—possesses a most engaging and seductive unity, and discovers in detail and texture an imaginative vision of nature; living touches of romantic, poetic character. The freshness of conception is one of degree and of relation between general effect and specific texture; it is, thus, hard to describe in words. Detailed objects are accurately given,—the needle-like rocks, the low, characteristic trees, the running water,—but they are neither seen nor felt as details like the shapes of things in the ordinary backgrounds of Verrocchio's atelier; they are inwrought features of an organized and fused concept of nature taken as a whole and in those larger elemental and cosmical constructions which limit a vaporous and transparent aërial envelope. Who but the young Leonardo could possibly have composed such a romantic yet objective vista? It is, in our opinion, his, beyond a doubt, painted, however, over an earlier landscape which was probably executed in the same dry tempera style as the foreground.

The Leonardesque character of the background to the *Baptism of Christ* seems manifest on comparison with the earliest dated work of the young artist,—the large landscape drawing in the Uffizi with

an inscription which authenticates it as having been drawn at "Santa Maria delle Neve," an unknown locality probably in the Arno valley, on the "5th of August, 1473." It is a view of a broad river winding between high banks, buildings, and groups of trees in the clefts of the rocks. The beauty of this rapid and summary pen-sketch resides not at all in specific detail but entirely in the extraordinary effect of space, light, and atmosphere, suggested by the simplest means in black and white. The similarity in its unity of conception and breadth of vision to the *Baptism* landscape background is striking, even considering the effects upon formal grounds alone. But the chief value of the drawing as a plea for Leonardo's participation in the execution of the latter work transcends any external criterion,—it is in a temperamental affinity and a conceptual attitude that the two are one.

The drawing, which instantly recalls those half-subjective impressions of remembered scenery or even of poetically described landscape such as we find in Sino-Japanese ink-sketches, may not necessarily have been done from nature; yet with the broadest means and in the most dashing strokes it translates real effects. The *Baptism* background, on the other hand, with the same breadth of elemental features and with the same half-subjective tone, as if painted largely from memory and, indeed, involving some vagueness of definition, succeeds in many passages in at once seizing the atmospherically plastic ensemble and interpreting textures of actual objects in such detail as to leave us in no doubt of its objective basis. It is safe to say that no European art before this time had so united the classic generalization of phenomena with a study of textures upon the same emotional level and with the peculiarly tense expression due to the personal factor. This type of landscape descends from Giotto and Masaccio,—ultimately from Greek modes,—but it is also at the base of much modern art. It is continued by Leonardo in a more imaginative fashion in his later works.

The large *Baptism of Christ* appears to have speedily become popular in Florence. Its composition was imitated both in sculpture and in painting, by the della Robbias, and by Botticini and Lorenzo di Credi. We find Botticini's free copy in a fresco in St. Andrea de Brozzi, near Florence; it is stiffer and simpler in all respects than the original. Greater interest attaches to Lorenzo di Credi's altarpiece

Leonardo, Landscape Drawing, Dated 1473

Uffizi, Florence

Leonardo, Study of a Drapery on a Kneeling Figure

Louvre

Leonardo and Others, Annunciation

Uffizi, Florence

with the same subject, in the Church of San Domenico below Fiesole, particularly when we bear in mind that Lorenzo di Credi was Verrocchio's most faithful pupil and assistant during a long series of years. His art is the best example of what the teaching of the objective investigator and skilled technician could lead to, when it was not applied by a strongly individual temperament and a superior imagination. Credi stood in closer relations to his master than any of the other pupils, and he was never guilty of shortcomings in respect of sober technique and careful execution; but his works in most cases leave us rather indifferent. They often seem to lack intrinsic necessity.

In the above-named altarpiece, as has been said, he borrowed the composition from Verrocchio, merely adopting some minor changes in the posture of the figures, and adding an angel. Credi's Baptist makes a more elegant, tripping impression than Verrocchio's, and his Christ does not stand with knees bent outwards, but in a more graceful posture, with one of his feet set in front of the other, as in the St. Thomas in Verrocchio's well-known bronze group on the Or San Michele. The sinewy and powerful figures have become limper and stouter; the contours have lost much of their elastic buoyancy; the expression and bearing are more sentimental than in Verrocchio's figures. The imaginative and romantic landscape has, of course, been replaced by a more conventional studio-landscape of the kind that was usual in bottega-work.

Among other contemporary repetitions of the same famous composition should be mentioned one belonging to the Jarves Collection of Yale University, New Haven. In this picture the composition is spread out horizontally in a way to involve a larger proportion of landscape than in Verrocchio's original; but the two main figures are closely copied. The angels, on the other hand, are rather free and poor interpretations of their original sisters, the one in profile especially manifesting the impossibility for an inferior artist to grasp and render the intellectual charm of Leonardo's angel.

Equal in historic importance to the *Baptism of Christ,* and probably ordered from Verrocchio about the same time or a little later than that picture, is the well-known but much-disputed *Annunciation* which now hangs in the Uffizi under Leonardo's name,—an ascription due in the first instance to Baron von Liphardt. Originally in the

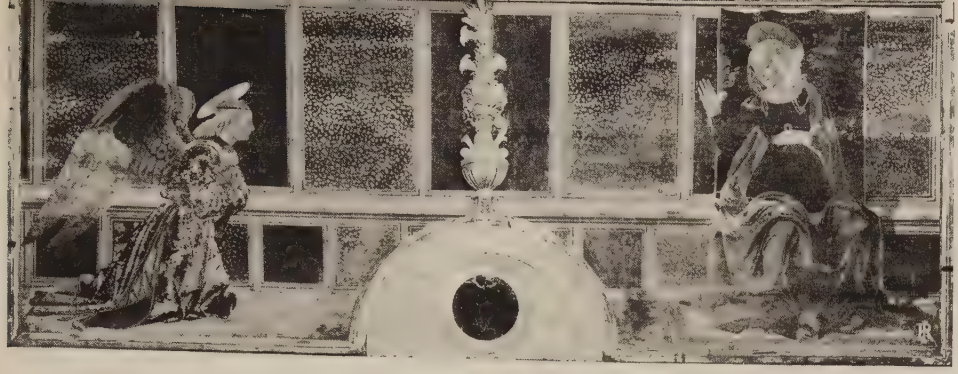
monastery at Monte Oliveto near Florence, where it passed for a work by Domenico Ghirlandajo, it was, on its removal to the Uffizi, claimed by both Morelli and Cavalcaselle, on quite inadequate analysis, for Ridolfo Ghirlandajo (active early sixteenth century). More recent criticism, while still far from an agreement as to the painter, is at least unanimous in attributing the work to the atelier of Verrocchio. The possible authorship is thus practically limited to Verrocchio himself, Leonardo, or some other pupil of Verrocchio, perhaps Credi; with, of course, the possible assistance of still other executants.

The fairly large picture at once attracts attention by its unusual shape and dimensions,—determined, no doubt, by its original setting, —and by its horizontal composition, closely resembling that of Alesso Baldovinetti's *Annunciation* of 1466 in the chapel of the Cardinal of Portugal in San Miniato al Monte outside Florence.[1] Baldovinetti's arrangement, which should be compared with Lippi's in the well-known lunette in the London National Gallery, is peculiarly interesting for its decorative relation to the architecture of the chapel, which involves some disjunction in the action of the kneeling figures, the angel being removed so far from the Virgin Mary as almost to sever the composition into two isolated halves. This peculiar feature is repeated by the painter of the Uffizi *Annunciation,* without Baldovinetti's excuse of a purely architectonic intention; and as a result the group as a whole tends to fall apart with an unpleasing effect. Except for the articulation in tone and the emphasis given to foreground detail and the landscape distance and vista, which fills in the gap between the figures, the Verrocchiesque composition would quite break down.

At our right Mary is seated on a paved terrace closed in by a heavy palace structure, awkwardly projecting into the picture and too abruptly related to the landscape, one of the screen of trees encroaching upon a corner of its wall. Before her is a richly carved reading-desk of marble, which, like the architecture, somewhat overwhelms the figures and, in fact, is drawn in a different perspective scheme from theirs. It also seems unstable and is altogether, for all its pretty detail, an extraneous motive in the ensemble.

The figures cohere far better with the landscape than with these

[1] This resemblance was first pointed out by J. Thiis, in his book on the early works of Leonardo.



Baldovinetti, Annunciation
San Miniato al Monte, Florence

Fra Filippo Lippi, Annunciation
National Gallery, London

Lorenzo di Credi, Annunciation
Uffizi, Florence

The Reverse of the Female Portrait
in the Lichtenstein Coll.

Leonardo, Study for the Angel's
Sleeve
Christ Church, Oxford

Leonardo, The Angel of the Annunciation
Uffizi, Florence

grandiose accessories. Mary, a simple, modest Florentine maiden, is suddenly aware of the angel's presence and rests one gentle, exquisite hand upon the open book while she raises the other in the conventional gesture of astonishment. Does her bearing express a cold and proud reserve, or is the expression only that of a natural and modest perturbation?

The Gabriel, except for the unnecessary wings, a less stereotyped conception, has yet used those strong instruments in flight, for he is poised in magnificent youthful energy, leaning forward on his knees, as from an arrested movement, while he raises his hand in emphatic salutation. In themselves, and as mere painting in shape and colour, the body and its enveloping and revealing draperies are nobly beautiful.

The mantles both of the archangel and the Virgin are indeed of glorious breadth and richness, and it is significant that their beauty is independent of any ornament. In great masses the firm and lustrous stuffs, like the heaviest silks, sweep over the bodies and trail carpetwise upon the ground. The treatment of the folds, rich to bewilderment in the Virgin's mantle, recalls in the fanlike spreading on the earth the Leonardesque angel in the *Baptism;* but the style is here more complicated and advanced, clearly indicating a somewhat more skillful phase of art and a later date.

In the Christ Church Collection at Oxford there exists a study of Leonardo's for the angel's raised arm. The drawing shows quite plainly that Leonardo at any rate must have worked at the figure of the angel. It is, of course, a more delicate matter to determine to what extent he really finished it; but to us at least the style seems predominantly Leonardesque.

The landscape in the Uffizi *Annunciation* deserves special attention for a poetic quality and a delicate atmospheric research, which immediately recalls the vista in the *Baptism of Christ,* especially in its sea perspective in hazy light. If the former be Leonardo's it is difficult to deny his authorship of the latter. These two landscapes, moreover, contrast strongly with the backgrounds of such pictures as Verrocchio's authenticated altarpiece in the duomo at Pistoja, where the maplike distance exhibits more of perspective than of poetry. We have nothing in any work certainly by Verrocchio himself or by his conscientious pupil di Credi or in the typical atelier

pieces to match the style and quality of these two Leonardo-like landscapes; and the theory that they are Leonardo's own is by far the most reasonable explanation of their relation to the whole Verrocchiesque product.

In itself the Uffizi landscape reveals an imaginative invention entirely worthy of Leonardo's genius. The much-damaged and darkened foreground is a green lawn flowered with carefully studied tulips, daisies, and larkspurs, and divided by a broad stone parapet from a level and rolling stretch of middle distance with winding roads and streams, the chief feature of which is a procession of tall, formal trees,—cypresses, araucaria, and others,—sharply silhouetted across the background light and air. To the right an arm of the sea and a fortified seaport lie within steep hills. This quite simple and traditional scheme reveals the mind of Leonardo most in its increasing confidence of treatment as the motives take on independent life in the open, and particularly in the drawing and structure of the trees, with the web of illumination and colour within their masses and about their lambent contours, in the ease and flow of the middle ground, in the still immature but already successful grasp of the supreme instrument for landscape expression,—the general truth to elemental values and to life enhancing light. No one who has studied Leonardo's authentic landscape with reference to its basis in objective reality can fail to recognize here an early essay, a mode which he was to make canonical.

The two religious pictures which we have examined are the most important examples of their class in the whole extant output of Verrocchio's studio, not only for the probable impress upon them of Leonardo's youthful hand but also in respect to any intrinsic qualities which are due to his teacher's design, supervision, or possible execution. This fact in itself—and few critics today would question the truth of such a judgment—goes far to confirm the theory of Leonardo's participation in the pictures. But it will help us to a clearer view of the situation if we briefly consider several other works in this *milieu,* even though they have no direct bearing upon our present theme.

Passing over as hardly to the point of our theme the very interesting *Three Archangels with Tobias* in the Florence Academy,—*l'œuvre* type of this subject in the Florence quattrocento, an exqui-

site piece in its landscape and in certain details, which has been ascribed to Botticelli, to Verrocchio himself, and, more recently, to Francesco Botticini,—we naturally fix our attention first upon the altarpiece in the Sacrament Chapel in the Pistoja Duomo, a work contracted for with Verrocchio at the end of the seventies and finished a decade later. In view of the documentary authentication here, our disappointment is keen before this picture, an *Enthroned Madonna with Saints,* for the master's own part in it seems evidently confined to the well-constructed and harmonious composition and perhaps to the design for the vigorous figure of the Bishop Saint, while the completion of the work in detail, as in the pleasing but uninspired landscape, and the actual execution in colour, were, no doubt, entrusted to the faithful Credi. Even if, with some authorities, including Morelli, we should accept the Pistoja altarpiece as representative and characteristic of Verrocchio's own craftsmanship in painting, we should yet hesitate before its cold and academic style and the distinct inferiority of its drawing, in life and fire at least, to the crudest figure-work in the *Baptism.*

No other large picture of the group can possibly exhibit the master's own craftsmanship, although there is no lack of variety and modest invention. Vasari, indeed, mentions the altarpiece, the *Madonna and Saints,* now in the Budapest Museum (originally painted for the nuns of San Domenico below Fiesole), as being a work of Verrocchio's and one of which he was proud. No doubt a drawing or scheme of the master's gave suggestion or basis for this curious and awkward but sincere production, with its redeeming sculpturesque severity of line and its brawny rustic types. For the average level of the school we might instance the most admired of several Madonnas (in the Berlin Museum)—a Florentine peasant girl of clumsy build but genial bearing, with her homely, swarthy child. She seems half-embarrassed in her sacred rôle; but the votive feeling in these minor things is rapidly passing into a domestic outdoor *genre.* With the feebler shop-pieces an eclectic imitation of other studio fashions may at times be noticed, yet it is curious to see, considering how little we really can know about Verrocchio's activity as *entrepreneur* of churchly panels, that there persists always, even in far-off provincial copies, an indefinable air of this particular artistic aggregate; were there no work by the teacher known, we

should yet be compelled to infer such a person as the *capo scuola*, just as, in a larger way, we could almost rehabilitate an unknown Giotto from his pupils or as we actually do reincarnate a lost Greek sculptor. From this point of view every scrap and shard of Florentine quattrocentist art in its kind may have significance. In an established tradition no one stands alone.

* * * *

From quite another angle the problem of Leonardo's relation to his teacher takes on new meaning. After all, the universal art of portraiture concerns us more than an afterglow of mediævalist iconography; and among the appealing human presentments of fifteenth-century Florence there exists at least one which may be by the painter of *La Gioconda*. This is the mysterious *Lady of the Junipers* in the Lichtenstein Gallery at Vienna, attributed now to Verrocchio, but formerly to Lorenzo di Credi, and by several very earnest students claimed for the young Leonardo. Bode[1] thinks this the portrait of Ginevra d'Amerigo Benci, said by Vasari to have been executed by Leonardo at Florence, and also mentioned in the Codice Magliabechiano as "so admirably painted, that it seemed less a portrait than Ginevra herself."

Bode's identification, however, is to us unconvincing. He believes the Lichtenstein picture to be a free copy of a portrait formerly in the possession of the Marchese Pucci at Florence, on the back of which in old writing appears the name "Ginevra d'Amerigo Benci." Unfortunately there is no actual likeness between the two ladies, and if we accept the one, we must exclude the other. In our opinion the inscription is trustworthy and the Pucci portrait possibly the copy of an older work which may have been Leonardo's lost early original. According to tradition the original was left unfinished, and the Pucci portrait, if a copy, would seem to bear this out; seeing that the figure itself looks like a poor contemporary imitation of Leonardo's style, while the landscape is entirely un-Leonardesque. On present evidence we must therefore consider the Lichtenstein portrait as that of an unknown personage, its only connection with Ginevra Benci being that of the name Ginevra,—borne of course by

[1] *Cf.* Bode's article in the *Zeitschrift für bildende Kunst*, 1902.

Verrocchio's Atelier, The Lady with Junipers
Lichtenstein Gallery, Vienna

Florentine Master, Supposed Portrait of Ginevra Benci

Lor. di Credi, Portrait of a Lady
Pinacoteca, Forli

Verrocchio, The Lady with the Primroses
Museo Nazionale, Florence

Lor. di Credi, Portrait of a Lady
Mrs. Otto Kahn, New York

many ladies,—which is indicated in the background of junipers, by a play upon the Italian words ("juniper-ginepra-Ginevra").

The panel is cut off at the bottom, as is apparent from the composition and especially from the decoration of the back, on which we find painted a slab of stone with laurel- and a palm-wreath, from which emerges a sprig of juniper, while around the wreath is a ribbon bearing the inscription, "Virtutem forma decorat." What remains of this device shows careful drawing of the various leaves and is well painted, and if this work on the back of the picture were all that we had, I, for one, should hesitate less in believing it to be a relic of the young master's craft.

But the portrait itself, painted on the obverse of the panel, raises doubt; for it is surprisingly unlike anything we know by Leonardo or by other Florentines of the late fifteenth century. Yet it *is* Florentine, beyond question; and, in spite of a certain lack of animation in the expression, a half-frigid or melancholic cast in the broad, somewhat pinched, and homely features, it is one of those faces which we never forget. It seems like an ivory ikon in woman's form, polished and toned with age, the face framed in by deep-coloured, crisply metallic locks and set against the mysterious, darkling labyrinth of spiny junipers emerging out of the blacks and browns with the most exquisite calculation of effect. The costume is chestnut, with white fichu and a black kerchief over the shoulder.

Now, does this ivory-like execution of the flesh tones belong to the time, does it go with the background, which is quattrocento enough, and has reminiscences of the *Baptism* and the *Annunciation* landscapes; or is it a skillful bit of eighteenth- or nineteenth-century restoration? Only the most exact technical analysis can settle this point.

We may also consider the chance of Credi's having successfully caught some of Leonardo's quality in a careful imitation. His portrait of a young lady, belonging to Mrs. Otto Kahn of New York, indubitably shows certain similarities to our *Lady of the Junipers,* especially in the modelling of the face and its ivory-like smoothness, but at the same time the conception is inferior. The Credi portrait lacks that peculiar psychic charm which fascinates us in the Lichtenstein picture, and, above all, the landscape is quite different; it is one of those conventionalized views in cold green tone

of which we already have said a word in connection with other paintings by Credi. Still we are on very difficult ground in regard to the Lichtenstein picture, and the attempt to buttress the attribution to Leonardo by an appeal to a silver-point drawing at Windsor helps us little in the solution of the problem. If this drawing of a pair of slender hands, one raised and holding flowers between thumb and forefinger, could be proved to be a study for the Lichtenstein portrait, the attribution to Leonardo would gain strong support; but the matter is still in the conjectural stage. The picture in all probability, before it was cut down, showed the hands, as was usual at the time, and we can perhaps guess from Credi's *Portrait of a Lady* in the Forlì pinacoteca how they may have looked. Credi's sitter is behind a parapet, her hands resting upon a bowl of flowers, the right hand holding a flower. The hands have some resemblance to the Windsor drawing, but it is impossible for us to follow the recent identification by Mr. Herbert Cook of this unknown lady with the Lichtenstein *Ginevra*.[1] The Forlì portrait is a feeble performance, far inferior to the Lichtenstein picture, and comparison tends to weaken the conjecture upheld by a few students that the latter work is by Lorenzo di Credi.

Still another complication awaits us in the fact that the *Ginevra* is the identical lady we meet in Verrocchio's famous marble half-length statue in the Bargello, where the long, characteristic hands held against the breast—one of them with a bunch of primroses—carry our thought to Leonardo. The statue has even been attributed to him,[2] but, while the elder master may well have been influenced by the younger, especially in the hands,—a motive in which Leonardo leads the world,—the rigid structure of the face and the bronzelike ringlets manifestly betray the colder, harder style of Verrocchio or of some capable pupil. A little-known sheet of silver-point woman's heads and busts at Windsor shows a striking resemblance in some of the heads to the *Lady of the Primroses* and might even be from the same model as that marble; but they are fragmentary sketches, without such specific characterization as would settle this matter. They show, however, Leonardo's adherence to Verrocchio's types

[1] *See* Herbert Cook, "The Portrait of Ginevra Benci by Leonardo da Vinci," *Burlington Magazine*, March, 1912.

[2] *Cf.* Hans Mackowsky, "Verrocchio," *Kuenstlermonographien* LII.

Verrocchio, The Putto with the Dolphin

Palazzo Vecchio, Florence

Verrocchio, David (detail)

Museo Nazionale, Florence

Leonardo, Two Heads

Pen-Drawing, Uffizi, Florence

Leonardo, Studies of Hands

Royal Library, Windsor

and his superiority to him as a draughtsman by virtue of their supreme touch of life.

Much could be said about the plastic works executed in Verrocchio's workshop during the time when Leonardo was an apprentice, but very little, if anything, is actually known about the pupil's share in the master's creations in clay, bronze, and marble. Verrocchio himself had evidently a predilection for the art of sculpture. Not only traditional statements by Vasari and other old writers, but the whole character of his art, give us ample reason to believe that Verrocchio felt himself more at ease when working in plastic material than when he used the brush. His artistic education was pre-eminently that of a goldsmith, and it is said that even when he drew draperies he soaked the cloth in plaster so as to arrange the folds in a more sculpturesque fashion. It is thus most likely that the master himself took a more active part in the execution of the sculptures than of the paintings which during the sixties and seventies were created in his studio.

It has been suggested that Leonardo might to some extent have collaborated in Verrocchio's well-known sculptures: the *David,* the *Putto with the Dolphin,* the *Lady with the Primroses* and even in the Colleoni statue; but we can hardly find any intrinsic proof to sustain, still less to necessitate, this hypothesis and therefore we will pass over it without further discussion, though admitting the possibility of Leonardo having had some influence in the creation of the smiling *Putto.*

There is only one little work, evidently executed in Verrocchio's bottega during this period, in which we can see a pre-eminently Leonardesque character, but an assumption based upon a single instance is hard to prove when material for direct comparison is lacking. The work in question is a terra-cotta statuette in the Victoria and Albert Museum representing the Madonna at full length with the child in her lap. The general style of the Madonna is purely quattrocentesque and the official attribution upheld in the "Denkmaeler der Renaissance Plastik Toscanas" is Antonio Rossellino. Still, on closer examination it will become evident to anyone acquainted with Verrocchio's sculptures that this work has been done in his studio, the main reasons for this ascription of origin being found in the treatment of the elegant hands and the draperies. (The

hands should especially be compared with corresponding parts in Verrocchio's well-known statuette in the same museum representing Saint Jerome reading.) But at the same time it seems to us that the Madonna is imbued with a more refined spirit, a subtler and more imaginative individual character, than we find in Verrocchio's authentic works. The Virgin is the same radiantly happy, smiling young woman we meet in Leonardo's early Madonna drawings. The slender form, the refined face with the slightly upturned nose and the high forehead, the characteristically bent position of the head, and the downward look, correspond especially to Leonardo's little Madonna drawing in the Uffizi.

If we direct our attention to the treatment of the Virgin's mantle we observe that the folds retain much of that plastic quality which is characteristic of Verrocchio's Madonnas (for instance, the terra-cotta relief in the Bargello), but at the same time they are more supple, thinner and more varied. Whereas Verrocchio's draperies involuntarily suggest the plastered cloth, the Virgin's mantle in this little statuette gives the impression of thin, slightly starched linen. The sharp crests and the flat folds on the ground remind us particularly of those in the mantle of the kneeling angel which Leonardo painted in Verrocchio's *Baptism,* and perhaps still more clearly of those in the above-mentioned studies of draperies in the Louvre and in the Uffizi.

We scarcely need dwell upon other details, because even if they add some complementary reason for an attribution to Leonardo, they do not contain any decisive characteristics. The work stands so much alone, and is evidently such a youthful creation, that the attribution to a large extent becomes a matter of sentiment. It lacks the force and firmness of Leonardo's later productions, the composition is somewhat angular and disjointed, like all quattrocento sculptures of this period, but still it has all the charm and freshness of a budding genius.[1]

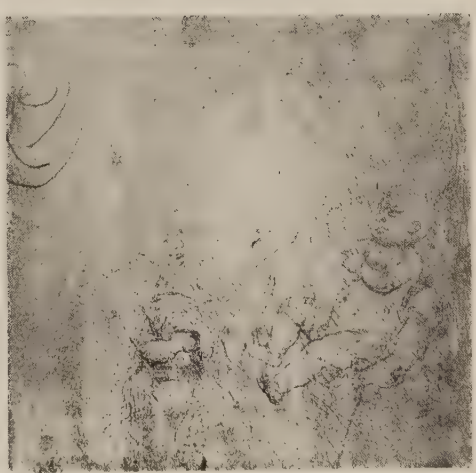
As far as we know, there is no other sculpture extant revealing so close a connection with the young Leonardo's art.

[1] Leonardo's name was first mentioned in connection with this statuette by Sir Claude Philips in an article in *The Art Journal,* 1899.

Verrocchio (?), Madonna
Kaiser-Friedrich Museum, Berlin

Verrocchio (?), Madonna
Altman Coll., New York

Pseudo-Verrocchio, Madonna
National Gallery, London



Pseudo-Verrocchio, Madonna Study
Uffizi, Florence

Leonardo (?), Madonna, Statuette in Terra-Cotta

Victoria and Albert Museum, London

IV

EARLY MADONNA PICTURES AND DRAWINGS

While the touch of Leonardo's hand may be discoverable when an apprentice or assistant in Verrocchio's atelier, we have as yet come upon no definite assertion of his independent art, except in the single, isolated landscape drawing of 1473, which, for all its strange originality, was probably an accessory study, intended for some background, rather than a complete thing. Still for the whole decade of the seventies, when the young master was building up the science and power which were soon to manifest themselves in the *Adoration of the Magi,* we find only early stages of the upbuilding shown in studies, with one or two very beautiful and freshly conceived pictures, but no such world-arresting *opus* as might have been expected from his natural gifts.

Precocious as the landscape sketch of Leonardo's twenty-first year shows him to have been, the first firm steps in his career were not taken before he had thoroughly tried the ground. This fact is very significant for the subsequent periods of his activity and is characteristic of the man. Nor need it in any way dull the edge of our curiosity and our delight, for we can, with careful attention, observe the master in some of his most intimate and spontaneous essays.

Nothing, indeed, in the whole series of Leonardo's works and visual inventions, devices, thoughts, has—all unconsciously—more of himself in it than a group of studies for two distinct Madonna compositions, which, as we shall see, must surely belong to the end of this decade, and in which for the first time in European art we have an entirely open, free, natural, yet broadly simplified and vitally concentrated conception and treatment of the Madonna theme, with no trace of traditional constraint in action or form, yet loyal to the best intrinsic feeling in the native style.

Before we cite examples of these little sketches, these flashes of intelligence and inspiration playing around the simplest and sweetest

of human themes, we must insist upon the exceptional and peculiar conditions under which the artist worked. It was no longer a purely votive impulse which determined the form of these images, for humanism and physical science, not to speak of individual and naturalistic taste in private patronage, had at this time, in Florence at least, shaken the foundations of religious art. Leonardo, reverent as he was in Christian themes, was evidently more deeply moved by the sacredness of nature and of life than by any church conception. As a result he conceives every religious subject in its concrete reality and its human aspects. The *Last Supper,* the *Adoration,* the *Nativity,* are for his art essentially dramatic, that is to say, actual and present spiritual issues; and when it comes to the traditional Madonna of the more domestic and familiar type, his instinct for realities leads him to emphasize the human side and thus to create his imagery as intimate drama, as a votive *genre.* It is this instinct which makes the early Madonna studies at once so universally appealing and so amazingly modern in their form.

Of much interest in regard to Leonardo's Madonnas is a date jotted by him on a sheet of studies now in the Uffizi, from which we learn that at the end of 1478 he began two of them.[1] The sheet also contains two studies of heads,—of an old man and of a youth,—arranged in profile to one another, obviously with the intention of emphasizing by contrast the marked difference in years between the closely related types. The head of the youth, particularly, is admirable; notwithstanding that it is rendered merely by a simple outline, the artist has contrived to impart to it a strong emotional expression. It is fugitive and airy, like a transitory vision in a dream, and yet perfectly real. We find similar heads in the *Adoration of the Magi.*

It is evident that preparations were made for these two Madonnas by a whole series of drawings. There are several of these drawings of Madonna motives from Leonardo's early Florentine period in the British Museum, the Louvre, the Museum at Bayonne, the Ashmolean Museum in Oxford, and the Uffizi. One of the chief motives, which the artist endeavoured again and again to represent with the greatest possible expressiveness and richness, is a *Madonna*

[1] The inscription, written in Leonardo's reversed left-hand writing, runs as follows: "... bre 1478 inchominciaj le 2 vergine Marie."

Leonardo, Madonna del Gatto-Drawing
Uffizi, Florence

Sodoma, Madonna Painting
Brera Gallery, Milan

Leonardo, Madonna del Gatto
British Museum

Leonardo, Madonna del Gatto
British Museum

Leonardo, Studies of a Madonna with the Cat

British Museum

del Gatto, i.e., a boy sitting in his mother's lap, or sucking her breast, while engaged in playing with a cat.

In a little drawing in the Uffizi we see the mother, radiant and happy, an engaging apparition, with refined, aristocratic features. She seems to be all soul, yet without thereby forfeiting any of her reality. Her form is slender and delicate, yet stamped with a certain buoyant energy. She looks fragile alongside of the sturdy boy, but her joy and nobility of soul shine forth in the radiant smile.

Those who are inclined to stigmatize Leonardo's figures as artificial and exotic should carefully study a drawing like this. Are not the corners of the eyes and mouth of this mother a-twitch with life? Do we not see the throb of the pulse in the hollow of the neck and the atmospheric shimmer over hair and cheeks? Where do we find pure joy, fresh as a dewy spring morning, better rendered than in this smiling face? Possibly riper artists would have delineated the woman's face with richer psychological content. Who but young Leonardo could transfigure it with such subtle, yet fresh and natural beauty?

Leonardo himself has hardly attained higher level. He is freshest and most spontaneous in his drawings. His ability, even in a hasty sketch, to reflect an idea, to catch a fleeting emotion in its passage across the soul, is quite unequalled. There is no attempt at elaboration, no laborious toil of incessant alteration and improvement. The preparation work seems to have already been performed in the mind of the artist. When he takes out his sketch-book it is in order to fix the vision with a few rapid strokes. He is more summary than even Rembrandt, in hastily indicating an idea that flashes across his mind. Yet his line often contains richer values of expression, his contours exhibit greater rapidity of movement, than those of the great Dutchman.

The majority of Leonardo's drawings, however, are not preparations for works of art, designs for pictures, or studies of details, but illustrations of his scientific ideas. Leonardo, on the whole, enlisted his hand and eye more in the service of scientific investigation than in that of art. He never exercised greater ingenuity or bestowed greater pains on a drawing than when it was intended to illustrate a law of nature or a mechanical invention. Drawing was a kind of pictorial writing for his imagination, a mode of transmitting ideas

to which he had to resort when words no longer sufficed to express his meaning. Behind it, as behind his notes, lay the endeavour to arrange and co-ordinate scattered observations and to gain a clearer insight into some scientific question.

Returning to the Madonnas, we should examine a sheet in the British Museum which shows two variants of the *Madonna del Gatto* motive. In one the boy is sitting in front of his mother, hugging the curled-up cat like a dear friend and playfellow. Smiling and with beaming face the mother looks upon the two friends; with one hand she seems to be admonishing the cat to keep quiet, with the other arm she embraces the child, so that the whole group is given a uniform, continuous contour. The idyll is unbroken and complete.

Below, on the same sheet, the boy is represented at his mother's breast but keeping hold of his feline friend, which arches its back complacently and sniffs at the Virgin's breast. In this drawing Mary's type is more monumental than in earlier drawings and reminds one of a Greek youth. Had she not the child at her breast we should hardly guess her to represent the Holy Virgin. In some special studies Leonardo has varied still further the boy and the cat motive, interlacing and grouping them so that their undulating contours merge into one another. The rapidly changing movements both in the child and in the cat, the endlessly soft play of the lines, at once so clear and so intricate, the curious natural affinity between the two little figures, have evidently exerted a powerful fascination on the artist's fancy, impelling him to fashion the same motive over and over again. It is easy to see that the boy still belongs to the same type as Verrocchio's lively bronze child with the dolphin; he has the same big head with a tuft of hair on the forehead, the same cheery snub-nose, dimpled cheeks, and smiling mouth; but he is softer and more supple and altogether more animated than his predecessor. Something of the nature and movement of the cat has been transferred to the boy, and in some of the studies the cat has been individualized almost as would be a child.

The last, and most remarkable, sheet in the series of *Madonna del Gatto* studies contains on both sides sketches for pictures with rounded tops. In both the Virgin is represented at almost full length, seated on a low bench or chair. One of her feet is placed on a high step, so that the knee forms a convenient seat for the big, chubby

Leonardo, Studies of the Christ Child with the Cat

British Museum

Leonardo, Madonna del Fiore
British Museum

Leonardo, Study for a Madonna with S. John
Ashmolean Museum, Oxford

Leonardo, Madonna from the Adoration of the Magi
Uffizi

Leonardo, Madonna del Fiore
British Museum

child, hugging the cat with arching back. The movement of the legs in the Madonna, accompanied by the sideways bend of her head, is rapid and vehement, so that the tight diagonal folds of the skirt run long and deep, catching big masses of light and shade, and over her projecting shoulder her mantle sweeps like a big projecting wing. The study vibrates with life; the chiaroscuro effect has been caught with impressionistic bravura, the values of light and shade are presented with a dash and a breadth which carry one's thoughts to Rembrandt. One may search in vain among Florentine Renaissance drawings for one with richer and more vigorous pictorial qualities.

Now it seems of the utmost importance that we should search out the possible translation of any of these studies into actual pictures. We may briefly indicate the lines of inquiry rather than discuss the problem fully. The only Leonardesque painting which seems to borrow the motive of the *Madonna with the Cat*—substituting indeed a lamb for the Christ Child's pet as perhaps less unconventional—is the pretty little early Sodoma in the Brera at Milan, which might have been painted in Leonardo's studio, and at least shows an imitation of the original scheme. If Leonardo worked the motive out himself, might it be in one of the small pictures which contemporary documents tell us first made him known to the French King, Louis XII? Or was this the work—although that was painted in Milan—which Vasari saw in bad condition in the house of Messer Baldassare Turini from Pescia?[1]

Another Madonna composition which at the same time occupied Leonardo's thoughts was that of the *Madonna del Fiore,*—the child sitting on his mother's lap trying to get at something which she holds in her hand, a flower or fruit. There are studies for this composition on both sides of a sheet in the British Museum. The Virgin is represented whole length, sitting turned half-sidewise with the child on her lap. She holds in one hand a flower which entirely rivets the child's attention, and with the other hand she props his back.

In a larger variation of the same motive in the Louvre—the

[1] Vasari writes: "At this time [during his sojourn at Milan] he painted for Messer Baldassare Turini from Pescia, who was datary to the Pope Leo, with incredible care and skill, a little Madonna with the Child in her arms. But whether through the fault of whoever primed the panel with gesso, or because of his innumerable and capricious mixtures of grounds and colours, it is now badly injured."

flower has been replaced by a bowl of fruit which, of course, interests the boy quite as much. With one hand he seizes some of its contents and with the other he pinches his mother's cheeks. The drawing was formerly attributed to Raphael, although there cannot be the slightest doubt that this sublimely simple monumental study is a work of the most masterly "poet of line of the Renaissance." All is done spontaneously, inevitably,—it is his nature to do things just this way. Only by the sophistication of comparison can we quite feel the sheer quality of such drawing; but for a certain almost naïve vitality in it we must compare it with the work of Rembrandt and of a few Far Eastern draughtsmen. The peculiar character which distinguishes it would seem to us to be the impression of innocence. It reveals the heart of a child and the skill of a master.

Leonardo thus varies the *Madonna del Fiore* composition in several drawings. One of the above-mentioned studies in the British Museum is rather faithfully followed in a picture which used to belong to Mme. Benois at St. Petersburg and now has been acquired by the Hermitage Museum.

Its composition as a whole is characterized by a naïve freshness, which, in conjunction with a certain lack of proportion in the figures, betrays the very young master. The child is strikingly big in relation to the mother,—a weakness which comes out in the picture more than in the preparatory drawing. For the rest he is a *bambino* such as we often come upon in Lorenzo di Credi's paintings. I may refer, for example, to the altarpiece at Pistoja, or to the Madonna in the pinacoteca at Turin; there the child has, in fact, been directly copied from the *Benois Madonna.* He has become still bigger and still stiffer in the joints, and above all, has lost all his childlike freshness. The curious little fellow examining the flower has turned into a wax doll with an insipid face who stares out at the beholder. His hands have stiffened in the position they assume in the Benois picture. This pose becomes meaningless when the flower is removed; here, instead of the flower, the mother holds a cherry between her fingers, but the boy does not display the slightest interest in it.

A comparison such as this serves to bring home to one in a most convincing manner the fresh vitality of Leonardo's *bambino.* He is not of wax; he is not a well-combed and stuffed doll, but a sturdy, vigorous little urchin with a sunburnt skin and only a faint indication

Leonardo, Madonna del Fiore

Hermitage, St. Petersburg

Lorenzo di Credi, Madonna

Pinacoteca, Turin

Flemish Master, Madonna. Copied from Leonardo

Galleria Colonna, Rome

Florentine Master, Madonna with the Vase of Flowers

Pinakothek, Munich

Lorenzo di Credi, Madonna with the Vase of Flowers

National Gallery, London

of hair on the large skull. He fascinates us by his vivid interest in the situation.

But above all, it is in the figure of the Virgin that the master gives full expression to his vivacious temperament. That graciously smiling young mother is something quite new in Florentine quattrocento art. There are no contemporaries of Leonardo who could have done anything like it; those artists were either too severely realistic or too sentimental. Her nearest counterpart is Verrocchio's bronze *putto,* but the expression of the latter is less modulated, his smile less tender, than that of the young mother. She literally radiates happiness as she observes the little fellow's knowing scrutiny. The eyes smile as much as the mouth; the whole countenance seems to vibrate with life. Particularly in the treatment of the cheeks and chin does Leonardo's supreme art of modelling come to the fore. Also the hand which holds the flower is remarkable by its convincing character as a prehensile organ in conjunction with its flexibility. In fact all the nude parts have been rendered with a living feeling for form such as no one but Leonardo could have been capable of; we find here something of the warmth of life and not merely its outward form.

The colouring is subdued with a singularly warm, uniform tone. The light shimmers with gold but the shadows tend to gray. The drapery in the background has a deep green tint and against it stands out Mary's greenish blue dress with the brownish yellow lining and her chestnut tresses in discreet harmony. The manner of painting is somewhat broader in the dress than in the flesh parts, where one cannot discern a single stroke of the brush although the colour is oil tempera throughout. It seems almost as though certain less important parts, such as the further knee, had not been entirely finished. The picture, moreover, has suffered a little in its lower portion on being transferred from wood to canvas; but the most essential parts are entirely uninjured. The golden halos were added later. On the whole, the colour impresses one as much as any feature of the work and, considering how close the picture comes to the authentic drawings in form and spirit,—how it reminds one of *La Gioconda* and the *St. Anne,*—I feel confident in accepting the work as one of the earliest independent and characteristic extant examples of the master.

It would be very interesting to follow out the numerous copies

and imitations of the motive of which the *Benois Madonna* seems the original source as discussed by Gronau,[1] but we need only say in passing that they include works by Credi, Albertinelli, Ridolfo Ghirlandajo, and even Raphael,—in the lost *Madonna with the Carnation,*—and that they shed some reflected light upon Leonardo's early work in this vein and show its popularity.

As regards the date of the *Benois Madonna* we note a distinct advance in freedom and expression over the immediately Verrocchiesque style of the Uffizi *Annunciation,* as seen in the sense for a transient emotion in the Virgin's face, in the alertness of line, the elasticity of bodily form, the more balanced and concentrated composition. While the conception transcends the quattrocento, the formal quality is still of that age and the picture must belong to the seventies or at least before the mighty *Adoration,* possibly to the year indicated in the inscription on the drawing of 1478.

The only other composition on this theme that need be considered in this connection is the *Madonna with the Carnation* in the Munich Gallery there ascribed to the master himself, although the consensus of critical judgment is almost unanimously against this view. Attributed by some to Credi,—to whom is also given the drawing for the Christ Child (Uffizi),—and by Morelli, with some scorn, to a Flemish imitator of the Verrocchiesque style, it is, in my opinion, a direct or indirect paraphrase by an Italian artist at the beginning of the cinquecento of a lost work by Leonardo, perhaps of the *Madonna with the Vase* mentioned by Vasari as "a picture which belonged to Pope Clement VII,—an admirable piece of work, in which, amongst other things, he painted a vase full of water filled with flowers with marvelous truth, down to the very dew drops on the flowers so that they seemed more real than nature." Leonardesque features here are the balustrade, the two double-arched windows, the greatly damaged but still enchanting rocky landscape in the distance, and the Virgin's type, which approximates closely that of the Virgin in the Uffizi *Annunciation.* These elements are clearly adapted from an early original or Verrocchiesque style; but the involved and awkward folds in the mantle and the rather puffy and lifeless Christ Child—one arm quite out of drawing, not to speak

[1] "Ein Jugendwerk des L. da V."; *Zeitschrift für bildende Kunst,* June, 1913.

Leonardo, Madonna and Some Heads—Pen-Drawing

Royal Library, Windsor

Leonardo, Studies of Male and Female Heads in Profile

Royal Library, Windsor

of the confused execution, due perhaps to repainting—leave a somewhat disagreeable impression.[1]

Whatever we may think of the Munich picture, it must remain of minor importance, even if a scientific restoration to its original condition should enable us to view it more favourably.

There remains, however, one more work of this decade to be considered, and this of unquestioned authenticity and interest, although entirely without traditional or documentary attestation, namely, the tiny *Annunciation* in the Louvre, formerly attributed to Lorenzo di Credi, but since Morelli's time accepted generally as Leonardo's. Mueller-Walde and others have taken it as the starting point of the young master's style and it is popularly regarded as such. We may confidently reject this theory and fix the date approximately as a little before that of the *Adoration.* There can be no great interval between the two pictures, for the formal types are closely related.[2] But whereas the little panel is a perfect achievement on very narrow lines of effort, the large *Adoration* is a summation of a whole phase of Leonardo's career.

The derivation of the Louvre *Annunciation* from its Uffizi prototype is clearly enough shown in the adoption of almost every essential element in the composition; but the material is entirely reorganized and concentrated to an integral effect. The execution, in details of drawing, in colour, in handling, shows immense progress in comparison. It is supple, firm, entirely sure of itself. The facial types, especially that of the kneeling Virgin, express a refinement, an intelligent adaptation of the natural model to generalized characters, and a special allurement in personal interpretation which belongs only to Leonardo in maturity and is to grow more and more marked, and, indeed, more consciously calculated, although it already has been declared in the small Madonna studies and is so striking, of course, in the mother and child of the *Adoration.* The grouping and spacing are made compact and internally composed, the two kneeling figures being brought into unison by their nearness and the flow of bounding curves in the bodies. The draperies, for all the tiny scale of the picture, have a breadth, a plasticity, an organic clearness absent from

1 Copies in the Louvre (Netherlandish) and at Highnam Court.

2 W. von Seidlitz dates this picture as belonging to the same time or shortly after the *Adoration of the Magi.*

the more laboured stuffs of earlier examples, or even, for that matter, from the perhaps overscrupulous details of the *Virgin of the Grotto*. The exquisite, tapering hands, the big-eyed, radiant, ineffable look of the two communing countenances, the bits of broadly indicated terrace garden and landscape, and even the severely plain architectural surfaces and textures, possess the Leonardesque touch, if in a minor mode. The picture seems like an essay in making perfect that which in the first instance left much to be desired. Far from perfectly preserved,—for it has darkened,—the panel is unrestored, and is perhaps the best piece of painting, as mere painting, which we have of Leonardo's first Florentine period.

* * * *

Even in this rapid survey, and considering the loss of at least one of two pictures well known in their day, we may feel that Leonardo was living and working towards new and bold ideals. But we have hardly done justice to the extraordinary variety of the motives treated in his drawings even at this early period. We have only spoken of a small group related to the early Madonna compositions, yet there are quite as fascinating specimens in the same wonderfully fresh and open-minded spirit,—drawings which, with all their sense for formal design, delight us most for their sheer, blithe acceptance of beauty in its own right and without the profound analysis of later years. We can only hint at their variety and charm.

Some have no artistic end in view, being mere graphic diagrams though invariably beautiful in form. Others are frank bits of nature, like the landscape of 1473 already mentioned, presaging the nature studies of the master's later life; or heads or figures from the model, as the Windsor sheet with exquisitely idealized yet entirely objective profiles of youths and girls and several old men. The marvellous psychology of characterization shown in the studies for the *Cenacolo* is not yet present in such studies; yet what living images they are, not only of their subject, but of the young craftsman's feeling for the pure beauty of humanity! Comparing them with Pollajuolo's drawings, from which they are ultimately derivative in style, we find a traditional and somewhat academic form flowering into universal yet entirely individual types. There is no assertion of science or skill;

Leonardo, Study of a Woman with a Child

British Museum

Leonardo, A Woman with the Unicorn

British Museum

Leonardo, Annunciation

Louvre

the artist is thinking only of his theme, and we are indifferent to the medium or the method.

We have spoken of a votive group and of landscape; there are also fable and allegory, as in the unsurpassable *Chastity* on the reverse of one sheet with the Madonna motives, already mentioned, in the British Museum. Remember the usual allegory in the art of the time, the stupid Piero Pollajuolos, the hardly successful *Fortezza* of the young Botticelli, and then come to this *Chastity* or *Girl with the Unicorn;* a little line sketch not four inches high,—it has the effect of a monumental picture. Here again is the note of greatness, as of complete freedom, in supreme simplicity. To judge by the framing of the composition and also by the execution of the background it was the artist's intention to make a picture of this sketch, but whether it was ever carried to the point of execution we do not know. With regard to the symbolical signification of the unicorn, Leonardo afterwards made the following note occurring together with other similar reflections in his "Bestiarius": "The unicorn is distinguished for immoderation and lack of self-control. In consequence of his passion for young women, he forgets his shyness and ferocity. Oblivious of all suspicion, he goes to the seated maid and falls asleep on her lap; and is thus caught by the hunter."

V

THE ADORATION OF THE MAGI

He began a picture representing the Adoration of the Magi, which contains many beautiful things, particularly the heads. It used to be in the house of Amerigo Benci, opposite the Logia dei Peruzzi, and was left unfinished, like his other works.

Such is Vasari's scant notice of Leonardo's first masterpiece, the great individual deed which, for all its incompletion, has room for almost every subsequent phase of the artist's development and which forms a landmark in the world's art. The work hangs now in the Uffizi and is to be identified beyond any possible question with that ordered in March, 1481, by the monks of San Donato a Scopeto, outside the Porta Romana at Florence. Documents published by Milanesi and Giovanni Poggi[1] inform us that the picture was to have been executed within twenty-four or at most thirty months and that the artist was to receive as remuneration a third of the property which in 1479 had been presented to the monastery by a certain Simone d'Antonio di Piero, under the express condition that the share in the property should be sold after the donor's death and the money thus obtained be appropriated to an altarpiece for the high altar of the church. The property was valued at 300 "fiorini di sugello," a by no means inconsiderable sum, considering that the gold florin in the fifteenth century was worth about $2.50, and that the value of money was at least six times as high as in our days. However, according to the contract, part of this sum was to be set aside as a dowry for one of the donor's heirs, and the artist had, moreover, to defray all expenses of the work, such as colours, gold, and the like. The legal representative of the monks was Leonardo's father, the notary Ser Piero da Vinci; whether he in any way affected their decision to apply to the young Leonardo there is nothing to tell us.

[1] *See* Milanesi, in *Archivio Storico Ital.*, Ser. III, Vol. XVI; and Giovanni Poggi, in *Rivista d'Arte*, May, 1910.

Leonardo, Preparatory Drawing for the Adoration of the Magi

Louvre

Leonardo, Drawings of Separate Figures for the Adoration of the Magi

British Museum

The picture itself—often mistakenly called a "cartoon"—was never finished, but was worked out in the monochrome under-painting as a complete design, with the beginning of the composition in tone, and with the surface execution partly indicated in the trees of the middle distance. It may best be analyzed in comparison with preliminary studies of which that in the Louvre collection of drawings is the most important. In this comparison we clearly see that Leonardo had by no means emancipated himself all at once from traditional shackles of composition.

In the Louvre drawing the scene is laid, according to traditional Florentine fashion, in the tumbledown manger, bounded on one side by a ruined palace. The conventional ox and ass—the latter a marvellous sketch—are also duly included. The Madonna is sitting in the foreground with the boy on her knee,—a lively little fellow akin to those in the early Madonna studies. He bends forward, receiving the casket of myrrh from the old king, who kneels on the steps, forming one of the diagonals of the picture. The opposite diagonal is marked by the two younger kings on the other side, the foremost of whom kneels with folded arms while the one behind stands bending reverentially forward with lifted hands. A column-like termination is formed on both sides by monumental patriarchal figures in sweeping mantles standing at the extreme ends. They do not partake in any way in the dramatic action but are merely silent witnesses and spectators. The man on the right possibly represents Joseph. Between him and the kneeling king are the inquiring shepherds.

Behind extends an open court from which two flights of steps lead up to a terrace. Further back in the courtyard the retainers of the kings have taken up their camp. Knights and spearmen throng this space in indiscriminate confusion, with others on the steps and the terrace. We note particularly two men blowing long horns. The figures are for the most part mere rapid studies of grouping, pose, and movement; the kneeling figures in the foreground are naked, in order to bring out the scheme of the limbs and their values in corporeal expression.

Leonardo afterwards endeavoured, in a number of special studies belonging to the collections in the Louvre, the British Museum, and the Wallraf-Richartz Museum at Cologne, to fix posi-

tions and movements more precisely. Thus in a drawing in the Louvre we see six different figures entirely or partially nude, amongst them the old king presenting his gift in an almost crawling posture. Behind him stands a more youthful companion leaning forward with clasped hands, expressing the highest degree of naïve rapture. The dramatic religious effect is still further diversified in a couple of other figures bending forward and gesticulating, and there are designs for two distant spectators, one shading his eyes with his hand, the other gesturing with both hands.

A sheet in the British Museum shows studies of background figures; one of them blowing an enormous trumpet into the ear of his companion, the other two seated in eager converse. All are executed with rapid and sure touch which aims, above all, to fix, in a single thought, movement as well as dramatic expression.

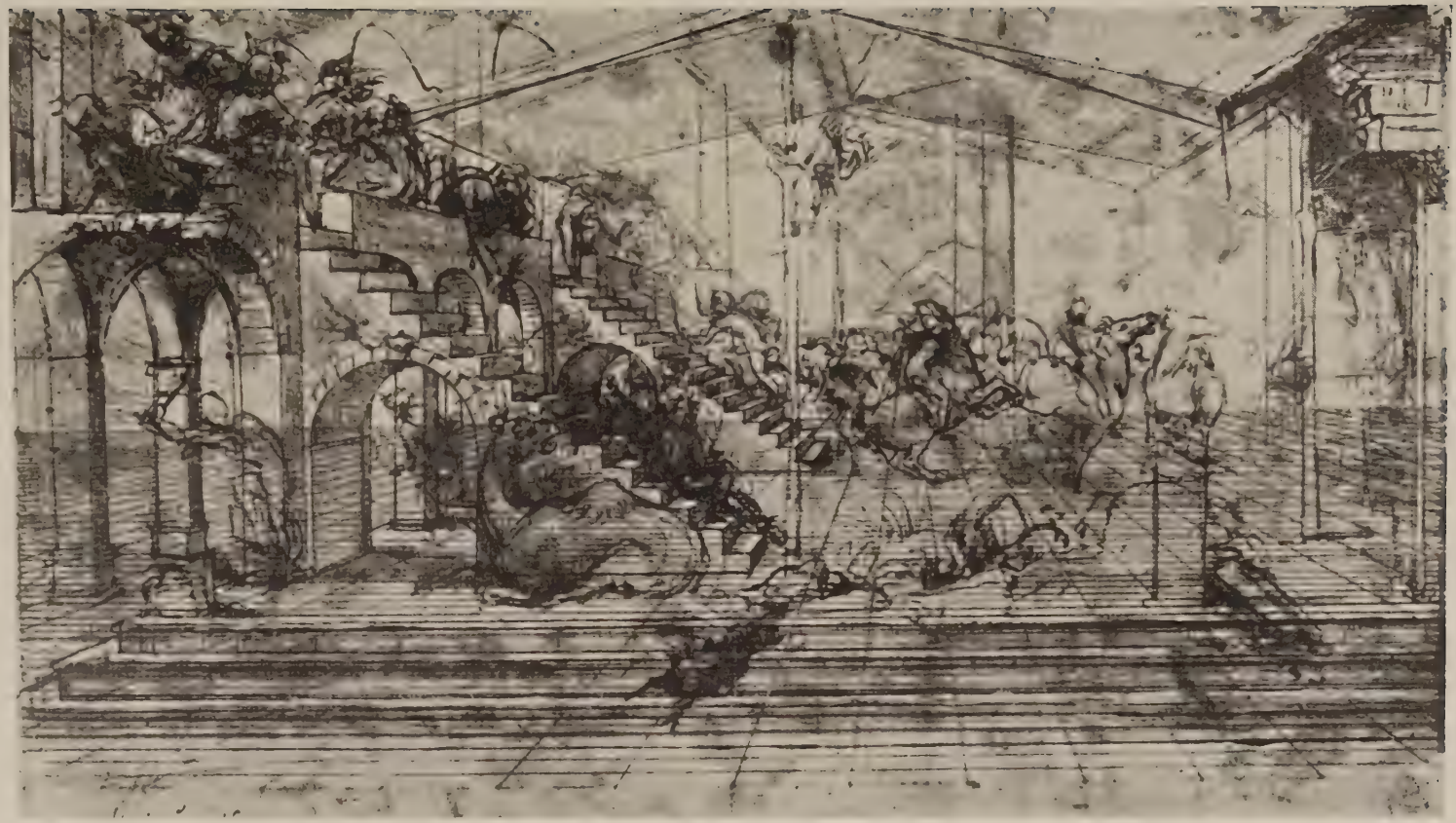
But the most interesting detailed study is that for the background composition as a whole, in the Uffizi. It is an architectural perspective in the style of Piero dei Franceschi, but at the same time an attempt to give an impression of teeming life and action.

The steps leading up to the terrace have now been moved over to the left side, the arches of the arcade being emphasized, and new figures are introduced. On the open ground, where men on horseback prance and wheel about, we already discern Leonardo's masterly drawing of horses. Nor has he forgotten the camel as a typical messenger from the East. The perspective is accentuated by the lines of construction converging at the point of sight. The artist seems already working with an eye to the truth which he afterwards formulated in these words: "Perspective is the rein and rudder of the art of painting."

Omitting less important preliminary studies and coming to the picture itself, the first impression is one of some bewilderment. The dark greenish and reddish brown tones, the vague, shadowy figures crowding an ensemble without accent in light or colour, without the engaging beauty of finished masterworks in the painter's craft, seem inadequate for the expression of the idea intended. It is only with close attention and on repeated examination that an intricate maze of faintly drawn or thin-washed shapes and patterns resolve themselves into an overwhelming unity of life and nature, that the dim personages gradually emerge from the gloom to appear as actors and wit-

Leonardo, Studies for the Adoration of the Magi

Ecole des Beaux-Arts, Paris



Leonardo, Study for the Background in the Adoration of the Magi

Uffizi, Florence

nesses in the noblest of dramas—the tribute of all that is kingly to the simple human Mother and her divine Child. In the end the thought, the form, the action, become lucid and plastic, with yet some haunting, almost uncanny suggestion of an obscure, profound, preternatural mystery behind the scene. This mystery is nothing more or less than the imagination of an unknown and invisible background, with the supreme secret of all artistry, launching its creative act upon untried adventures. The picture did not satisfy the monks—it did not satisfy Leonardo and cannot satisfy his lovers; but it can do more than satisfy, for it can arouse and instruct us, it can guide us in the quest for the man, the race, the age which it represents, in a moment of concentrated vision at the end of a phase of long research. A creative idea is never finished and faultless; nor can it ever rest in its own achievement. The art of Leonardo, now entirely itself, is leaping bounds and unconsciously working for the future; with an outward conformity to customary tradition it institutes a revolutionary mode. We are assisting at the birth of the High Renaissance in spirit and in form.

If we bear in mind the Louvre study, we soon discover the momentous initiative of the determined final scheme, its enrichment in the figure groups, packed together like a living wall about the Virgin and Child, its suppression of the conventional manger with the cattle and its relegation of the ruined architecture to a severe flight of steps in the left background, the substitution for the formal arrangements of quattrocento design of a natural foreground, defined in planes by the contour of its rising mass and by the two receding trees and particularly in the general conception of the action as lived out in the open. The action, in other words, is logically and justly related to its setting,—if we remove the whole foreground figure composition or introduce another in our thought there still remains a concrete, moving, palpitating world of landscape with its accessory episodes.

But the change in spirit and form is best seen in the leading motive of the grouping. The seated Virgin with the Child, forming, as in every static altarpiece, the central interest, is even more than usually emphasized by the orthodox pyramidal pattern in the leading accessory figures and by an entirely original isolation from her surroundings. The open interval is bridged only by the boy's arm,—

too long a bridge, indeed, for it is out of drawing,—and keeps the quiet focus of the ceremonial sacred and aloof from the profoundly reverent Magi, who at once support the stability of the design in their sharp triangular contours, while diminishing its severity by circling and receding curves leading the eye into the complexity of middleground and vista.

To the right kneels the old king with the finely cut features whom we already know in the preparatory drawing. He presents his casket of myrrh to the Saviour and receives in return the coveted blessing. The contrast between the profoundly reverential old man and the little Christ Child, carrying out his mission with the greatest dignity, is most impressive and affecting. The boy's movements are as supple as in the *Madonna del Gatto* studies. The mother assumes the same position and holds the child in exactly the same way as in the little study in the Uffizi. No long interval can have elapsed between this drawing and the picture.

Furthest to the front in the foreground to the left is placed the youngest king. He too is kneeling, but not prostrate, as he turns diagonally towards the Madonna, his eyes riveted on the Child, fascinated by the long expected sight. He lets the hand which holds the casket drop, forgetting in a moment of blissful rapture all that he has intended to do and say. Next to him the third king, old and white-haired, prostrates himself with face to the ground, as if unworthy to behold the radiant apparition in the Virgin's arms. In this figure the veneration and religious devotion of the two other kings is enhanced to ecstatic worship. He has presented his gift, and humbly awaits the miracle.

Strangely enough this figure has often been misinterpreted, the old Joseph, who stands behind the Virgin, having been taken to be the third king. The explanation is, no doubt, that Joseph is holding in his hand one of the caskets that have already been presented, a motive which often recurs in the Florentine representations of the Epiphany. As a matter of fact, the old man behind the Virgin is not an enraptured worshipper; he is a crusty old fellow with the look of senile boredom which the Italians usually associate with Joseph. He is, however, very important in the formal pattern as at once fixing a triangle and as a link in the chief diagonal line in the composition.

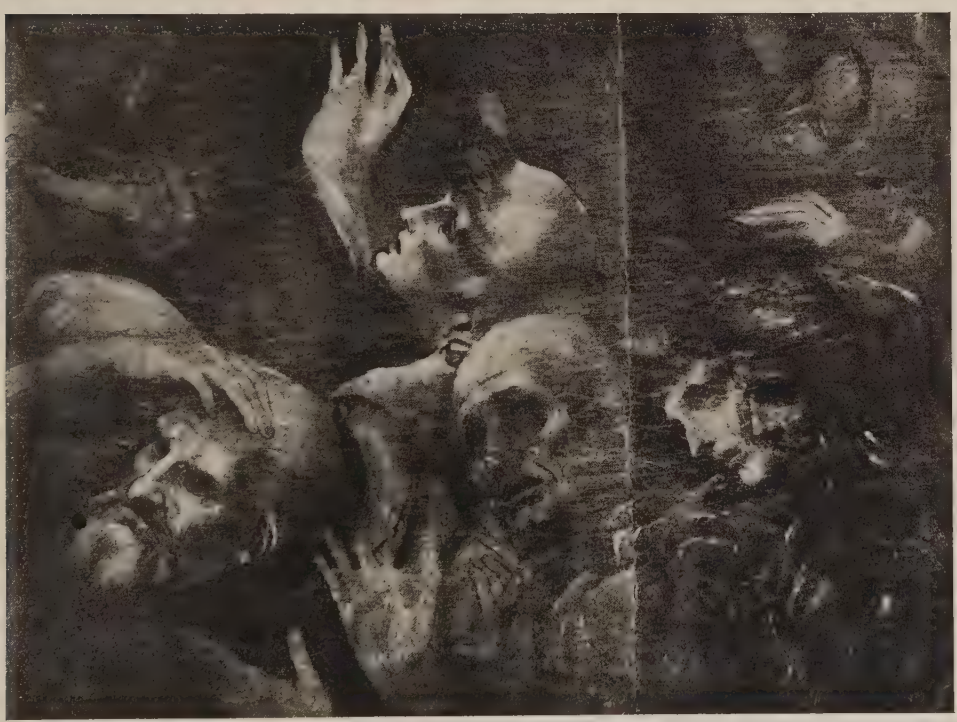
The devolution of groups and their concomitant integration

Leonardo, Adoration of the Magi

Uffizi, Florence

Raphael, Heads from "The School of Athens"

Leonardo, Figures from the Adoration of the Magi



Leonardo, Some Heads from the Adoration of the Magi

(cf. Raphael's cartoon above)

would probably have gone still further with execution in colour, although the complexity of form and action must have baffled even Leonardo. The principal figures are now in light under-painting, while the secondary personages are in dark reddish brown tones. From all sides the spectators, shepherds, and warriors participate in the mystery. One notices particularly the two old men on the right side, one of whom seems to have difficulty in seeing, and the other still more difficulty in believing the testimony of his eyes. Behind them stands a youth gesturing in amazement and gazing straight up at the invisible guiding star, stayed in its course above the fateful spot. One of the young shepherds (or is it an angel?) points up to it through the leafage of a tree.

On the opposite side throng the soldiers, two of whom are mounted. The rider to the left is a condottiere like Verrocchio's *Colleoni,* his horse like *Colleoni's* bronze stallion. Under the horse's mouth appears a grand prophetic figure in a sweeping mantle. He forms the terminal column of the composition on this side, while a young soldier in shining armour bounds the opposite wing. This sinewy knight with hawklike features takes the place often reserved for the painter's own likeness. Among other foreground figures, particularly among the old men, we note several well-defined, engaging, intelligent types. These old men's faces have been particularly imitated by later painters, first and foremost by Raphael, the most docile of Leonardo's followers in Florence, as we shall have ample occasion to see on further study. He has used such heads in the *School of Athens,* in the Vatican and elsewhere.

The alterations in the background as compared with the two preliminary drawings will at once be apparent on an examination of the three reproductions. The equestrian battle which has been introduced into the final picture should be compared with Leonardo's later battle painting. In the far background the painter seems to have intended to open up an expansive outlook over the sea.

Individual and novel as is this whole representation of the *Adoration,* it is not without precedent in its iconographical and formal modifications. The theme, with its opportunities for dramatic and *genre* treatment, was ever a favourite in Italian art, and Leonardo is not the first to break with the merely popular interpretation. Criticism has hardly recognized the debt which our master owes to

earlier essays in the subject. It is of great interest to consider at this point the contribution made to it by his friend and somewhat older and more conservative fellow-craftsman, Sandro Botticelli.

Botticelli executed at least six different representations of the *Adoration,* one of which, the big fresco in the Palazzo Vecchio, has been entirely destroyed. Of the five surviving, there are now two in the National Gallery, London, two in the Uffizi, and one in the Hermitage at St. Petersburg. In the interval of more than a decade between the first and the last, not merely Botticelli's art, but Florentine painting as a whole, underwent an important development, not least apparent in its iconography. This change has an indirect bearing upon Leonardo's style.

Botticelli's earliest representation of the *Adoration* is a little picture in the National Gallery which may date from about 1468. The composition is horizontally processional; the crowd of retainers winds in a long cue, filling the greater part of the picture. The main scene is pushed to the right, where the Virgin and Child in a ruined building receive the kingly homage. The background is filled with mountains separated by narrow passes where the processions can thread their way. The form is essentially still that of the fourteenth century. Its decorative value depends on the undulating lines of numerous figures woven together into a human flood, which, with its wavelike motion, carries the spectator's gaze along towards the main motive. This form was developed to its greatest pitch of beauty by Lorenzo Monaco and Fra Filippo Lippi. Botticelli has followed in their traces, though he bestows on each separate figure more individual beauty and reality, and lends greater dramatic variety to the action as a whole.

In his second and somewhat later picture in the National Gallery, Botticelli adopts the tondo shape, in itself nothing new, as Fra Filippo had already used it in one of his Epiphany pictures. What is new is the centralized formal scheme and the rich development of circling groups and foreground details of human and animal action, the latter motives being quite independent of the votive group. The Madonna and the Child are placed in the exact middle of the circle, to which the gaze of the spectator is automatically directed, and to which all movements from the circumference are carried. At the sides and above the Madonna tower classical ruins, evidently intended to

Botticelli, Adoration of the Magi. (ca. 1468)
National Gallery, London

Botticelli, Adoration of the Magi. (ca. 1477)
Uffizi, Florence

Fra Filippo Lippi, Adoration of the Magi
Collection of Sir F. Cook, Richmond, England

Botticelli, Adoration of the Magi. (ca. 1476)
National Gallery, London

fill up the otherwise empty upper half of the picture, for the horizon line is approximately central. The kings kneel in front and the attendant groups are in two half-circles forming a ring of figures. This main group is still further set off by being placed on a natural raised stage. We may remark here the secular tone of the composition, which shows the influence of Antonio Pollajuolo.

Botticelli's next essay on this theme is the masterpiece painted probably in 1477, or at least several years before Leonardo's *Adoration,* for one of the chapels in Santa Maria Novella; not, as was long supposed, as a commission from the Medici on the occasion of Lorenzo's escape from the daggers of the Pazzi conspirators, but, as has been shown by Herbert Horne, on the order of the merchant Giovanni Lami. We need not discuss this well-known and all-important work in any detail, but may remark its simplification of the foreground groups to an assembly of individual portraits, the first, frank, modern portrait gallery introduced into a nominally religious picture, and observe the odd persistency of older motives in the formal arrangement and in the focussing of attention by its means upon the quite insignificant Madonna in the background. We can well understand the enthusiasm with which such a change of the votive spirit to a secular end was received in the Florence of Lorenzo's time, soon to reverberate with Savonarola's stern forewarnings. But our concern with the work is in its possible influence upon Leonardo. From it and from the London tondo there may have come certain general suggestions as to pattern and grouping; and Botticelli's *Adoration with the Medici Portraits* was well worth the study of genius. Still, on the whole, there is as yet no near kinship between the two masters. More interest for the matter in hand attaches to Botticelli's large oblong unfinished Epiphany panel in the Uffizi. Here the date, which is unknown, has much importance, for the picture, although painted over in oils at the beginning of the seventeenth century,—it was originally, no doubt, an unfinished work,—must determine the question of interacting influences between the artist and his greatest rival. In my opinion, based on technical evidence, the composition is prior to Leonardo's and does not belong to Botticelli's later period, after his journey to Rome in 1481, as is often claimed. Yet it was perhaps this journey, the call to the decora-

tion of the Sistine Chapel, which explains the interruption of the execution.

We here observe first a relation to Botticelli's earlier motives in the position of the Virgin and Child and in part of the groups of the retainers; but as compared to the more realistic Uffizi *Adoration with the Medici Portraits* there is a return to a more legendary interpretation, with an increase and extension of the accessory detail, and to an expression of dramatic movement, life, and votive fervor. The resemblance to Leonardo, often noticed, is distinctly apparent in the kneeling or prostrate kings, in passages of the thronging shepherds, riders, and other subordinate figures, and also in the background rocks, which have more substance and elemental structure than Botticelli's usually loose, decorative abstractions.

Now, if we accept the date of 1481, or earlier, which is based on Herbert Horne's exact investigations, we must, I think, assume that it was in this case Leonardo who borrowed from Botticelli. Yet the two pictures would be closely contemporary, and it is not certain that the artistic interchange as between friends who, in spite of some disagreement upon the means of art, were one in their serious studies, could not have been that of give and take on both sides. We are hardly justified in claiming any preponderating formal or spiritual influence effected on the part of either man, for both could absorb and recast in an individual mould the best ideas of their contemporaries. Then why not of one another? It is greater art to learn from one's fellow-artists than to follow out one's own independence to a jealous and isolated peculiarity. On the whole, Botticelli, in his dematerialization of style, was already looking backward to the purely classic modes and rhythms of his tradition, while Leonardo was just beginning the conquest of fresh realms in both form and expression. There could be no real rivalry between two such diverse spirits,—they were in different worlds; but in any case Leonardo in his later compositions could have repaid his friend seven-fold, had he needed such help, for any suggestions received at this crucial moment.

And that, for a time at least, Botticelli felt the inspiration of Leonardo's new style, is clear in the last of his Epiphany pictures, that painted at Rome in the early eighties and now in the Hermitage. We need not point out the steadying influence of Leonardo here, but

Botticelli, Adoration of the Magi. (ca. 1480)
Uffizi, Florence

Botticelli, Adoration of the Magi. (ca. 1483)
Hermitage, St. Petersburg

Filippino Lippi, Adoration of the Magi

Uffizi, Florence

it is manifest in the more harmonious ordering of parts, proportion of interest, and lucidity of effect. With this tribute to his younger contemporary the close relation ends, for Botticelli was soon to forget the whole professional and progressive world of art with his passionate absorption in problems aloof from the *milieu,* in the study and illustration of Dante, in the adherence to Savonarola's party, in the exploration of imaginative paths in painting, which he has made entirely his own.

We must pause for a moment to notice how Botticelli's best pupil, the ever available Filippino Lippi, essayed to do the task left unfinished by Leonardo. The monks of San Donato were well served at last some fourteen years after Leonardo had left Florence, and we may see the picture adorning the same gallery which holds the other. How well-knit and free in design, how excellent in every detail, how full of charming effects, how rich in landscape, how human in portraiture, how easy and picturesque! But we must cite the evidently satisfied Vasari: "This picture contains Negroes and Indians, quaint costumes, and a hut of peculiar beauty." It follows Leonardo's scheme in many respects, but here the less said the better about any real relation to Leonardo's art.

* * * *

Three years before the monks of San Donato a Scopeto had ordered their big altarpiece from Leonardo, he had already received an important commission from the Florentine Signoria. This was, according to the document published by Milanesi in the above-named article in the Archivio Storico Italiano, a picture for the chapel of St. Bernard in the Palazzo Signoria. The commission had in December, 1477, been entrusted to Piero Pollajuolo, but, as the latter had for some reason unknown abandoned the task, it was transferred in January, 1478, to Leonardo. And, in fact, Leonardo evidently made a number of preparations for this work, for on the 15th of March, 1478, he received twenty-five florins from the Signoria; but here his interest in the matter seems to have ended. It probably proceeded no further than the purchase of materials and perhaps some sketch for the composition. The commission was transferred in May, 1483, to Domenico Ghirlandajo, who, like the above-named artists, failed to execute it. (He was called shortly after to Rome.) The Capella

di San Bernardo was left without paintings down to the time when Ridolfo Ghirlandajo decorated it in the manner which, in part at any rate, is still to be seen at this very day.

On the ground of a statement in the Codice Magliabechiano that Leonardo commenced a picture for the Palazzo Signoria, which "in accordance with his drawing was completed by Filippino Lippi," many critics, beginning with Crowe and Cavalcaselle, have endeavoured to trace Leonardo's influence in the big altarpiece by Filippino, representing the Madonna surrounded by the four saints of the city of Florence, St. John the Baptist, St. Victor, St. Bernard, and St. Zenobius, which was transferred from the Palazzo Vecchio (formerly the Palazzo della Signoria) to the Uffizi. According to the commission, however, Filippino's picture was not painted for the Cappella di San Bernardo, but for an altar "in aula consilii," or the chamber which afterwards received the name of "Sala dei Duegento."[1] Thus there is *no* documentary evidence for rolling into one the two commissions, namely, that which in 1478 was entrusted to Leonardo, and that which in 1485 was given to Filippino. Nor do the composition and the artistic character of the picture give us the least support for the supposition that Leonardo had any influence on its conception. It is thus still uncertain whether Leonardo even began the picture for the St. Bernard Chapel in the Palazzo Signoria; still less do we know what it was to represent or how he had conceived the composition. The only composition by Leonardo which chronologically could be brought in relation to this commission of 1478 is a pen-sketch representing the *Adoration of the Shepherds* (Bonnat Collection, Bayonne). It is stylistically closely connected with the earlier drawings for the *Adoration of the Magi*—it could indeed be explained as a preparatory stage in the evolution of this picture—and it is the only complete sketch by Leonardo for an altar picture which might have been earlier than the *Adoration of the Magi*. But this drawing has no sign of direct relation to the Cappella di San Bernardo.

* * * *

Somewhat fuller are the historical statements with regard to another official commission which was entrusted to Leonardo, prob-

[1] *Cf. Rivista d'Arte*, Settembre, 1909: Poggi, "Note su Filippino Lippi."

Leonardo, Adoration of the Shepherds (Study for an Altar Piece)

Bonnat Coll., Bayonne

Leonardo, Study of Bernardo Bandini
Hanging in the Gallows
Bonnat Coll., Bayonne

ably about this time. Our knowledge of it is not based on documents but is gathered from a very remarkable drawing belonging to the Bonnat Collection at Bayonne. The drawing represents a man hanging from a gallows, according to the artist's inscription, "Bernardo di Bandino Baroncigli," clad in "tan-coloured baretto, black satin doublet, lined black jerkin, blue cloak lined with fox-skin, the collar of the cloak covered with black and red velvet; black hose."

Bernardo Bandini was a man who had acquired a sad notoriety in the history of Florence. It was he who on Easter Sunday, 1478, plunged his dagger into Giuliano de Medici's breast during the great riot in the cathedral, when the opponents of the Medici, under the leadership of Messer Jacopo Pazzi, made a violent attempt to overthrow the oligarchs. The event had a momentous bearing on the whole life of the community, and we may take for granted that it fell to Leonardo's lot to witness one act or other of this bloody drama. The treacherous attack in the cathedral while the service was actually going on was, as we know, only half successful. The Duke Giuliano fell, but Lorenzo, the more dangerous of the two brothers, managed to make his escape behind the bronze door of the sacristy. All endeavours to incite the populace to rise against the "tyrants" failed; the Florentines were well aware on which side lay their real advantage for the moment. Their fury against the assassins knew no bounds. Several persons who were supposed to belong to the party of the conspirators were literally lynched in the Piazza della Signoria, among them one of the prelates most closely connected with the bishop; his arms and legs were torn off and his head was spiked on a lance and borne through the whole town with shouts of "Muoiono i traditori!" (Death to the traitors.) Doubtless no one living in Florence at the time can have failed to see and hear the triumphal progress of unbridled passion, and to witness how on the same and the two following nights close upon seventy persons, many of them half-naked and badly mangled, were hanged from the windows of the Palazzo Signoria and the Palazzo del Capitano di Giustizia.[1]

A line from Leonardo's hand about these infernal doings would, of course, have been of the greatest psychological interest, but we

[1] *Cf.* the vivid description of Luca Landucci, who witnessed these events with his own eyes, in his "Diario Fiorentino," edit. J. del Badia.

look for it in vain. It is not till later that he begins to note down his thoughts and observations from different domains of life. Thus, for instance, he once writes: "And you, O Man, who will discern in this work of mine the wonderful works of Nature [he is referring to some anatomical studies of his]; if you think it would be a criminal thing to destroy this, reflect how much more criminal it is to take the life of a man. And if this external fabric of a man appears to you marvellously wrought, consider that it is nothing as compared with the soul that informs that structure. Verily, be he what he may, it is divine things that a man bodies forth in his works at his pleasure. Let not then your rage and malice destroy a life such as this; verily he who does not value it does not merit it himself."

The Florentines of those days, however, seem scarcely to have comprehended points of view such as those enunciated by Leonardo in the above utterance. On the contrary, they went so far in their vindictiveness against the public malefactors that they were not content with their execution; the victims of their hatred were to be exposed in effigy to the staring gaze of the populace; that is, they were to be painted dangling from the gallows on the tower of the Bargello, the building where "il capitano di giustizia" had his office. Several eminent artists have executed such portraits of malefactors. After the great massacre of the followers of the Pazzi, Botticelli was commissioned to do the paintings and in them he represented several of the conspirators hanging with their heads downwards. Unfortunately Bernardo Bandini, the very man who had dealt the decisive blow, had managed to make his escape on a ship to Constantinople, thus eluding the first bloody vengeance. But he was not to enjoy a long respite. The mercantile connections of the Medici extended even to Turkey, and Lorenzo de Medici succeeded in inducing "il gran turco" (to use the words of Luca Landucci) to have Bandini imprisoned and sent to him at Florence. On the 23d of December, 1479, the malefactor arrived under safe escort at his destination, and five days later was dangling on a rope from the window of the Palazzo del Capitano di Giustizia. On this occasion Leonardo was evidently an eyewitness, made his drawing of the hanged criminal and noted the costume. There seem to be strong grounds for the supposition that Leonardo had obtained a similar state commission to that of Botticelli previously, namely, to depict the executed crimi-

Leonardo, S. Jerome Doing Penance

Gallery of the Vatican, Rome

nal in fresco on a public building. But whether the painting was actually executed we do not know.

* * * *

A picture of which tradition has nothing to tell us, though it must be reckoned one of the most important of Leonardo's preserved works, is the *Penitence of St. Jerome,* that mighty but almost inchoate image in the Vatican Gallery. Here as in the *Adoration* we are at first rather puzzled than arrested in admiration. Can this dulled, blackened, partly ill-rendered vision be of inspiration, or is it but an academic study in an impossible mode,—an artist's vain experiment in strange construction and overwrought expression? Left unfinished in its brown under-painting, like the *Adoration,* the panel was considered at one time as of no value. In fact, it long did duty as the lid of a chest, after the head had been sawn off, until it was rescued from this barbarous treatment by Cardinal Fesch, the well-known connoisseur of the early nineteenth century, who had the good fortune, also, soon after to recover the saint's head in a shoemaker's shop. No wonder the picture was neglected as a mere blackened horror, for it has no possible charm, nor was it intended to have; yet it reveals great power and is of the very highest value as an illustration of Leonardo's thought about his art.

The saint, an old man recalling a type in the *Adoration,* nude, except for a toga-like mantle thrown over the left shoulder and about the loins, the flesh modelled in light and dark, kneels in agonized emotion before the image of the Crucified One, his right arm flung across the picture in the act of beating his breast with a stone, the left turned towards his heart. The figure dominates the field and is relieved in full light against the outer buttress of a cavern or sort of natural bridge through which we see to the right a middle distance of cliffs and an opening disclosing a small chapel.[1] At the left a bare, desert outlook ends in sugarloaf mountain outposts like those in classic Sino-Japanese landscape, sharply jutting into sunlit space. Under the extended arm a rounded knob of turfed rock half enters the foreground. The lower right corner of the field is given to the big roaring lion, turned toward the

1 Interesting architecturally, and discussed in Richter, "The Literary Works of Leonardo da Vinci."

saint, with open mouth in profile, the great tail in a nervous curve to the left forming with the body a letter S.

We may well leave to the reader the pleasure of analyzing for himself the purely formal elements of this Herculean design, with its immensely significant interplay of static and dynamic motive in line and plane and tone, its countering of upright and horizontal, of curve and angle, its interrelation of animal and human structure and the adjustment to ground form and vista. Nor need we insist upon the expressive value of the emotional drama except to say that here as in the *Adoration* we have a work far beyond the possible quattrocento palette, a design which might have been conceived by Buonarotti and, but for the faulty foreshortening of the left arm, drawn by Luca Signorelli. It is with our more immediate task in mind, that of pointing out the historical bearing of the work upon the style of the master and through him, that of all Europe, that we observe how Leonardo here envisages the problem of an elemental chiaroscuro in the general disposition of the landscape, in the silhouetting of the optically objective presences against the vaguer visual sensations,—the near and the more than visually sensed factors being plastically related almost for the first time in history. This is the problem of modern European landscape, based upon Giotto and Masaccio and Leonardo, and it cannot be too much insisted upon as of historical importance. That Leonardo failed to achieve the solution of such a problem, that he was compelled to inhibit his imagination to such practical efforts as the narrower composition of the *Virgin of the Grotto,* is only to say that he could not, as one man, master difficulties which still keep Western art searching. We can, however, clearly see that the treatment of this background, with that of the *Adoration,* had its influence upon Buonarotti in the Sistine Chapel in his rare essays at setting his figures upon the real earth and enveloping them in aërial substance. We may also say that the study of these problems must have been rather instinctive than conscious with Leonardo, that they are modifications of the traditional decorative landscapes of his teachers, and induced in the first instance by his simple love of nature for herself, born in him and bred first by his experience at Vinci, reinforced by Florence, and again reinforced by the imminence of the Alps of Monte Rosa over the plains of Lombardy. It cannot be gainsaid that Leonardo was as pro-

foundly moved by atmospherical phenomena and wild mountain scenery as he was by anatomical and botanical studies. The drawings of his later years, with the backgrounds of authentic pictures, abundantly prove this fact. When, therefore, the merely formal problem of pictorial planes was presented to him in the conventional Verrocchiesque architectural barriers or foliage, he simply appeals to nature in her largest aspects and resolves the convention in a plastic ensemble based upon elemental light and tone. The problem had already been solved in a narrower fashion by Piero dei Franceschi; but Leonardo, loyal to his teachers and intent upon his own discipline, may not have seen Piero's work. The *St. Jerome* must appeal to us especially as representing the quest for that largeness of vision which the quattrocento painting of Leonardo's time quite lacked, and that it is thus a milestone in the development of the master's thought although it remains, as art, in an experimental stage.

VI

LEONARDO'S ARRIVAL IN MILAN. THE VIRGIN OF THE GROTTO.

A second great stride in Leonardo's career begins with his removal from Florence to the court of Lodovico Sforza at Milan, where for nearly a score of years, until the overthrow of his patron in 1499, the now mature master found room for the full exercise of his powers in such achievements as the *Virgin of the Grotto,* the Sforza equestrian statue, and the *Last Supper.*

Early accounts differ as to the date of his arrival at Milan, and we also lack precise information concerning the immediate occasion of Lodovico's summons. As regards the date, the year given by Vasari, 1494, is demonstrably wrong, for we know that the master was in Milan at least as early as the 25th of April, 1483, when he signs a contract with the Confraternita della Concezione concerning the execution of an altarpiece for its chapel in the church of San Francesco. On the other hand, the artist was still in Florence on the 28th of September, 1481, to receive the last payment of wine and barley from the monks of San Donato a Scopeto. This leaves a period of close upon a year and a half during which we have no secure information whatever as to Leonardo's movements.[1] Mueller-Walde's assumption that he arrived at Milan as early as the end of 1481 is surely based upon a misapprehension.

Another early writer, the anonymous author of the Codice Magliabechiano, compiled towards the middle of the sixteenth century, says that Leonardo was thirty years old when he was sent by Lorenzo il Magnifico, together with the musician Atalante Migliorotti, to carry a silver lyre to the Duke of Milan because he played so sweetly upon this instrument. The time here mentioned agrees nearly with that deduced from documentary notices and we have also

[1] *See* Mueller-Walde's article in *Jahrbuch der kgl. preuss. Ksmlgn.,* 1907; and Seidlitz, "Leonardo da Vinci, der Wendepunkt der Renaissance" (Berlin, 1910), p. 101, note.

some hint of an extraordinary avenue of approach to Lodovico's favour in a polite accomplishment upon which Vasari offers the following additional details:

> It came to pass now, after the death of the Duke Gian Galeazzo of Milan, Lodovico Sforza having risen to the same position, that Leonardo in the year 1494 in an exceedingly honourable manner was summoned to Milan in order to play the lyre to the Duke, who found great delight in this instrument. Leonardo brought with him an instrument which he had made with his own hand, in great part of silver, in the shape of a horse's skull,—a thing strange and novel,—in order thereby to obtain fuller harmonies and a richer beauty of tone. On this instrument he surpassed all other musicians who had gathered there to vie in playing. Besides, he was the best improviser of verses of his time. When the Duke heard Leonardo's wonderful discourse, he was captivated by his gifts to an extent which seemed quite incredible.

It is indeed noteworthy that both Vasari and the anonymous writing quite independently state that Leonardo made his first appearance at court in the capacity of musician and instrument-maker. Waiving details in the narratives, they still witness the universal tradition, obtaining soon after the master's time, of his great talent as a musical virtuoso and improvisatore. The Duke seems, in fact, to have made a point of surrounding himself with eminent musicians, Megliorotti being one of the best among them. This by no means proves, however, that Leonardo's reputation as a painter was not one of the chief reasons for the summons.

Lodovico Sforza, called "Il Moro" from his swarthy complexion, had already, at the time when Leonardo must have entered his service, unlawfully seized the government of the duchy. He had indeed made an unsuccessful attempt at this usurpation shortly after the assassination of his elder brother, Galeazzo Maria (December 26, 1476), and was compelled for the moment to go into banishment in order that the succession might be thus secured to Gian Galeazzo, son of the murdered Duke, then a boy of eight years. However, by dint of an extraordinary adaptability and power of insinuation, Lodovico contrived to bring about a reconciliation with the widowed Duchess, Bona of Savoy, and in September, 1479, he obtained unrestricted admittance to the Lombard capital. Tradition records the exclamation of the Bona's aged minister, Cecco Simonetti: "Duchess, I shall lose my head, and you the State!"—a prophecy soon to be fulfilled, for the seventy-year-old Simonetti was executed in 1480, and in the following year Bona of Savoy had to give

over the sceptre and the wardship of her son. Lodovico assumed entire control and the helpless boy was immured in an isolated part of the *Castello.*

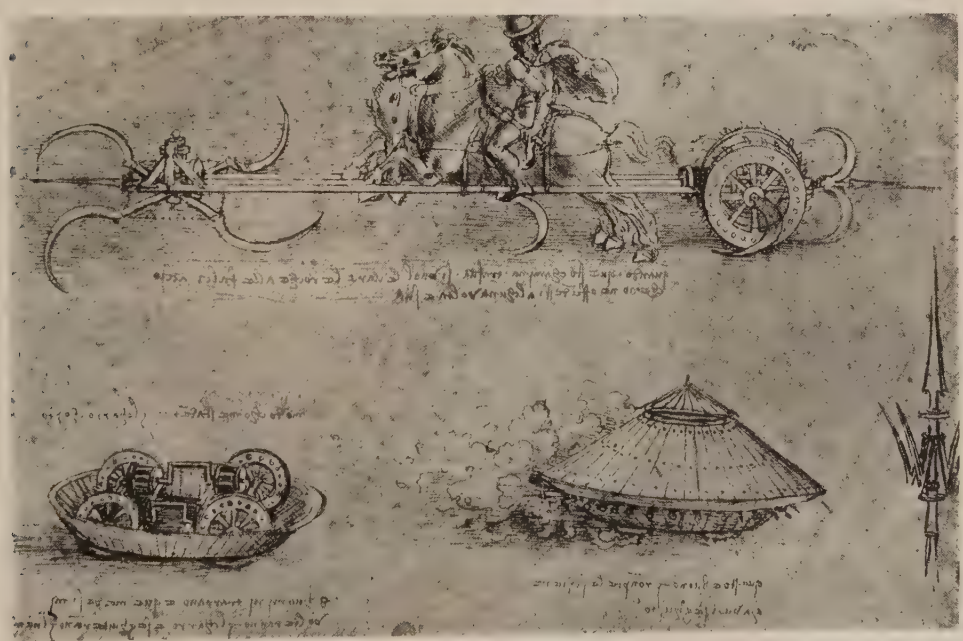
Il Moro was not among the cruelest of Renaissance princes, but he was an unscrupulous intriguer and built up his power and political influence chiefly by setting his enemies at loggerheads. Personally, it is said, a coward and sensualist, he was withal gifted and magnificent in his tastes, with a bent towards art and music. Philippe de Commines, writes of him: "Le dict seigneur Lodovic estoit homme tres saige, mais fort craintif et bien souple quant il avait paour (j'en parle comme de celuy que j'ay cogneu et beaucoup de choses traicte avec lui), et homme sans foy s'il veoit son prouffit pour la rompre."[1]

It was no mean realm that Lodovico had thus usurped. Milan was, next to Venice, the richest city in Italy, richer, with its outlying territory, than the whole of France or Germany; and to its material wealth there was added considerable intellectual culture. Ever since the days of Petrarch, various eminent humanists had been attached for longer or shorter periods to the court, and scientific studies had distinguished representatives at the neighbouring university of Pavia. Literary and artistic interests seem to have been especially cultivated in Lodovico's time. A retinue of more or less fawning and needy poets attended the despot, and it was a requisite of court form to be able to improvise verse and play the lyre. The best musical virtuosi were enticed to Milan; we find there not only Leonardo's friend Megliorotti, but the great violinist Jacopo di Sansecondo, the conductor Franchino Gaffurio, the composer Testagrossa, and the singer Christoforo Romano, well known also as a sculptor. We meet also such talented men as the painter Vincenzo Foppa, and the sculptors Cristoforo Solario and Caradosso. In architecture, a greater dearth of native ability had necessitated the importation of foreigners,—Germans at first and latterly Florentines,—for the works of the great cathedral, already centuries long in progress and still far from completion. It is a little-known fact of great interest that Leonardo himself had a hand in this vast enterprise. Designs and models for separate parts of the structure were undoubtedly made by him; some of the drawings are still extant. His suggestions,

[1] *See* Solmi, "Leonardo," Chap. III.

Lodovico il Moro
Portrait in Castello Sforzesco, Milan

Beatrice d'Este, Wife of
Lodovico il Moro
Ibidem



Leonardo, Drawings for War Machines
Royal Library, Turin

Leonardo, Drawing of a Gun Foundry

Royal Library, Windsor

however, being naturally inconsistent with the Gothic principles adopted, seem to have been unacceptable to the commissioners. Genius as he was, the Florentine master could hardly have entered completely into the spirit of the alien style.

Notwithstanding his all-around equipment as an artist and his special fame as a painter, Leonardo seems to have entered the Duke's service with an especial view to its practical and utilitarian duties, and to have won appreciation by his knowledge of military engineering (a science, however, which he never seems to have actually practised for Lodovico as he did later on for Cesare Borgia), by his hydraulic works in irrigation, by his skill in architecture, and particularly, in view of the project for the Sforza equestrian statue, by his ability as a sculptor. Leonardo himself was evidently anxious to emphasize his practical claims to attention. This is shown clearly in the draft of the famous letter (Codice Atlantico),[1] on the preparation of which he bestowed unwonted pains, giving a summary of the chief works and inventions through which he deems himself best able to serve the Duke. This gloriously self-reliant document runs as follows:

Most illustrious Lord, Having now fully studied the work of all those who repute themselves masters and artificers of the instruments of war, and found that these inventions in their mode of operation in no way differ from those in common use, I will endeavour, without disparaging others, to explain myself to your Excellency. I will lay before your Lordship my secret inventions, and then offer them to you to carry into execution at your pleasure, as opportunity may arise, together with all those things which, for brevity's sake, shall be set forth only in part here below.

(1) I have a sort of extremely light and strong bridge, so contrived as to admit of being carried with the greatest ease, and with the aid of which one may pursue, and at any time flee from, the enemy; and others secure and indestructible by fire and battle, easy and convenient to remove and set up. Also contrivances for burning and destroying those of the enemy.

(2) During the siege of a town I understand how to draw off the water from the trenches, and make an endless variety of bridges, battering rams, scaling ladders, and other instruments appertaining to such expeditions.

(3) Moreover, even if by reason of the height of the ramparts, or on account of the strength of the place or its position, it should not be possible during the siege of a place to avail oneself of bombards, I have nevertheless means of demolishing any fortress, even if it were built on a rock.

(4) I have also a kind of bombards, extremely convenient and easy to transport; with these it is possible to hurl forth showers of small stones, a

[1] This draft, possibly by another hand, is not in the usual reversed script. There can be no question, however, of its authenticity.

perfect whirlwind, and with the smoke of it to strike the enemy with terror, to his great damage and confusion.

(5) Further, I have methods for quite noiselessly constructing mines and secret winding passages, whereby one can reach any given point, even if it were necessary to pass under trenches and rivers.

(6) Further, I can make covered wagons, secure and indestructible, which, when they are introduced among the enemy, manned with shooters, can break through even the largest army of armed men; behind them the foot-soldiers can follow, without being injured or hindered.

(7) Further, I can, as occasion requires, make bombards, mortars, and light ordnance of the most beautiful and serviceable forms, quite unlike those in common use.

(8) When bombards will not serve, I will contrive catapults, mangonels, *trabocci,* and other instruments not now in use, of marvellous efficacy; in short, according to the variety of circumstances, I will contrive various and endless instruments of offence and defence.

(9) Should the encounter be at sea, I can construct many different machines and instruments admirably adapted both for defence and attack, and ships which can resist the attack of the largest bombards and powder and smoke.

(10) In time of peace I believe myself able to vie successfully with any in the designing of public and private buildings and in conducting water from one place to another.

Further, I can execute in sculpture,—marble, bronze, and terra-cotta,—and likewise also in painting, anything that is at all possible of accomplishment and against any competitor whatsoever. I can further undertake the execution of the bronze horse (*il cavallo*), which shall be an immortal honour and an eternal monument to your father of happy memory, and the illustrious house of Sforza.

And, if any of the aforesaid things should seem impossible and inconceivable, I offer, and am at any time ready, to make trial of them in your park or in any place that may please your Excellency, to whom I commend myself with the deepest humility.

* * * *

The earliest reliable documentary evidence of Leonardo's presence in Milan is, as we have said, the contract between the artist and the Confraternita della Concezione, signed on the 25th of April, 1483.[1] This religious society counted among its members representatives of the leading Milanese families and possessed a chapel in the church of San Francesco. The confraternity had already, three years before, ordered for the chapel a large ancona, which, in accordance with the custom of the time, was to consist of several compartments for pictures set in an elaborately carved and sculptured frame, the sculpture including figures in relief. The wooden carvings were executed by Giacomo del Maino and must have been uncommonly ornate as this work alone took two years and probably used up a good deal of the

[1] *See* Dr. Biscaro's essay in the *Archivio Storico Lombardo,* 1910.

society's appropriation.[1] Carving and sculpture duly finished, it remained to contract for gilding and painting the whole huge frame, and for the pictures which were to fill in three panels in its lower portion. An agreement was made, as mentioned above, with Leonardo and the brothers Giovanni Ambrogio and Evangelista Preda, an exact schedule of the work allotted to the several artists being drawn up by the representative of the confraternity, the schedule also specifying what colours and what sort of gilding were to be used for the frame.

The whole of the latter was to be covered over with the finest gold leaf, except the faces, hands, and feet of the figures, which were to be painted in natural colours. Instructions were also given as to the colouring and ornamentation of the mantles of particularly prominent personages, such as the Madonna and the Eternal Father. The painting on the frame was entrusted to Evangelista Preda.

The contract gives a strong impression of the importance attached to these purely technical matters, but concerning the actual paintings it speaks only in general terms. The large central picture was to contain the Virgin and Child, a group of angels, and two prophets; the side panels, four singing and music-making angels. The prophets, one of whom seems to have been Isaiah, indicate that the *Conception,* in one form or another, was to have been the main theme; and it was, in fact, in commemoration of this event that the confraternity had been founded. The work was to be finished by the 8th of December, 1483; but Leonardo and Giovanni Ambrogio Preda did not have their pictures ready until much later. Up to the present, all attempts to ascertain the exact date of their completion have been in vain. It is only in the dusty archives of the law that we find a ray of light obliquely cast upon the *Virgin of the Grotto* as she appeared in her appointed station to the living people who were to dispute the possession of her image. The pictures were delivered to the society in due course; but the painters were not satisfied with the valuation which was made by certain members of the confraternity and which they considered extremely arbitrary and unfair.[2]

[1] The ancona was ordered on the 8th of April, 1480, and the last payment made on the 7th of August, 1482.

[2] In the contract a minimum price of 200 ducats (800 lire imperiali) was fixed for the whole ancona. If this limit should be exceeded the additional price was to be determined by valuation.

Ambrogio Preda and Leonardo da Vinci then addressed to the Duke of Milan a petition begging him to mediate in the controversy and to appoint other and unprejudiced valuers, seeing that "Li scolari della conceptione non sono in talibus experti, et quod cechus non judicat de colore." They laid stress on the refusal of the society to pay more than twenty-five ducats extra for Leonardo's *Madonna,* although others had offered one hundred ducats for the same picture.

The petition is undated, but there is reason to think that the controversy arose within a few years after 1490. We do not know the outcome; whether the Duke may have at once interposed in favour of the artists, or have paid the higher price and secured the work himself, or whether the affair was settled in some other fashion through his mediation. Dr. Biscaro, who has scrutinized this question, thinks it most likely that Leonardo's work remained in the possession of the confraternity down to the end of the fifteenth century, and that then, or soon after, it was acquired by the French King, Louis XII, who was intensely eager to obtain possession of Leonardo's paintings. (If he is right the bargain-driving *confraternita* must have come around to Leonardo's terms, or else accepted the picture as alms, for the painter was no man to surrender a just cause.)

These legal details, which yet delineate an ever human aspect of history, are necessary in order to make clear the very important fact that in some way or other the *Virgin of the Grotto* had to yield its place in the altarpiece, probably during the last decade of the quattrocento, to the free but rather feeble copy now in the National Gallery at London and there for many years attributed without question to the master himself. The copy, on available evidence, is mainly by Preda. All we certainly know about the early vicissitudes of the original work is that at the beginning of the seventeenth century it was in the possession of the King of France and that it came thence directly to the Louvre.

The *Virgin of the Grotto* reveals the painter's highest aspirations during his first years at Milan. As compared with earlier work it manifests a severer formal unity, a more definite compositional structure, while at the same time there is still some lingering over naturalistic detail and some want of subordination of specific motives to leading effects in form and action. An almost painful elaboration

Leonardo, "La Vierge aux Rochers"
Louvre

of the material substance and texture takes the place of the bold, ambitious invention of the *Adoration* and the *St. Jerome.*

The composition is an approximate pyramid of four figures in two groups, reinforced by smaller triangles and by the convergence of frontal and ground planes toward the head of the Virgin near the centre. The open spacing and curved bodies, with the tonality, relieve the static symmetry. In the chief group the Virgin supports the infant St. John, while the Christ Child with His guardian angel makes another group, almost isolated from the first yet one with it in rhythm of action and expression.

The Virgin kneels, her head bowed gently outwards, her right hand clasping the little kneeling saint at her side. The left arm and hand, in complete foreshortening, reach out towards the boy Jesus in a protecting and consecrating gesture. This striking motive leads the eye *au fond* and thus accentuates the distance between Mother and Child, yet serves at the same time to bring the two together, the side contours of the main pattern being carried thereby over the shoulders and back of the angel which are in full light. The two children, one worshipping, the other blessing, are thinking only of each other. At first we scarcely know which child is which, and in fact the iconographical treatment of the theme, especially the prominence given to the Christ Child by his position in the foreground, while closely approaching the Nativity type, is entirely *sui generis.* We feel that the bond of sympathy uniting the two children is the most intimate emotional theme in the picture. This is, of course, something altogether different from the *Conception of the Virgin,* the subject stipulated in the contract, and Leonardo may well have induced the brotherhood to substitute a less superhuman idea. The sweet boy nature is well expressed by the execution. In drawing and modelling, these little naked figures in the open, with their sunburnt skin warming in the golden light, show infinite research. They illustrate the maxims laid down in the "Treatise on Painting," according to which the limbs of children should be expressed above all by softness and plump rounding and dimpling.[1] This seems to be the first time in Italian painting when child figures attain complete life and natural charm.

[1] *See* the observation in the "Trattato": "How small children have joints which in regard to thickness are the opposite to those of adults."

The composition in light has, indeed, an organic function in the figurative ensemble which marks a stronger grasp of this idiom of pictorial expression (albeit with some limitations in execution), than the earlier Florentine craft had known. Formal elements and surface textures emerge from the shadows of the grotto under the main illumination, which enters from above on the left to dissolve in half-lights on flesh, drapery, and foreground foliage. Unfortunately the local colours have darkened, so that the picture takes on a somewhat heavy and even gloomy tone. Originally, however, the flowers of the foreground, irises and anemones, must have been relieved in brighter hues against the sombre rocks, while the bit of water near the edge must have mirrored tremulous reflections.

At present the faces, hands, and naked boys are the only notes of real light in the work. It is, indeed, rather from the nuances of these still very wonderful figure passages taken one by one, than from the ensemble, that we can divine the painter's original intention. Reinforcing the somewhat fitful and murky foreground effects, the background light pierces in scattered rays through fantastic basalt rocks, focussing in chiaroscuro behind the Virgin and blending with the main illumination.

The figures are thus woven into a tissue of half-lights, broken in places by the stronger reflections. They emerge like united *Leitmotifs* out of a plastic orchestration in tone just where the illumination is lowered to the faintest and mildest chords. It is indeed this subtle, plastic interplay of light which gives to the picture its wonderful touch of mystery. According to Leonardo's statement in the "Trattato," chiaroscuro in conjunction with foreshortening marks the consummation of the art of painting ("Il chiaro e lo scuro insieme co'li scorti e la eccelenzia della scienza della pittura").

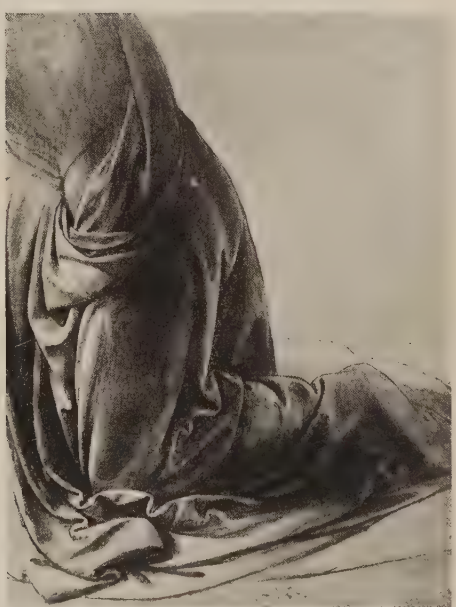
In details of style we still observe a predominantly quattrocento character. The tightly drawn, diagonally creased folds of the Virgin's mantle, which spread out fanwise on the ground, recall those of the *Adoration of the Magi*. We find the drapery at times overstudied and lacking in the complete breadth of style which was soon to prevail. We may instance the bunched mantle of the angel, which sacrifices organic clearness of structure to a rich surface of illumination.

Such reminiscences of an earlier style, and particularly the

Leonardo, Head of "La Vierge aux Rochers"

Leonardo, Study for the Angel in "La Vierge aux Rochers"
Turin

The Angel and St. John, from "La Vierge aux Rochers"



Leonardo, Study for the Kneeling Angel in "La Vierge aux Rochers"
Royal Library, Windsor

Ambrogio Preda, "La Vierge aux Rochers"
National Gallery, London

Ambrogio Preda, Two Music Making Angels

National Gallery, London

sharpness and precision of the details, will be manifest on comparison with Preda's copy in the National Gallery at London. The treatment here is broader, more summary and facile, quite without the scrupulous nicety and thoroughness of the quattrocentisti. This is especially true of the extremities. The composition submits some changes in pose and movement, the most important modification being the suppression of the pointing gesture of the angel. With some gain in unity of action, the composition loses here an important point of support and articulation both in line and tone; a dark void is substituted for the gesture. Such a radical change in a substitute copy could hardly have been made, however, except by order of the master himself.[1] On the whole the copy wins some breadth of execution and homogeneity of decorative effect only at the loss of almost everything incisive, spontaneous, and delightful in the original work. It only repays close analysis in its indication of the transition to a later, looser manner, entirely aloof from the Florentine tradition.

In the two angels which occupied the wings of the ancona and are now joined to the London panel, Preda is more himself, in a racy, provincial mediocrity. We discover considerable kinship in details of style between these independent figures and the copy from Leonardo, but we know of more attractive work from Preda's hand, as the garlanded *Girl with the Cherries* in the Metropolitan Museum at New York, which, like so many other pictures by the same artist, was once attributed to Leonardo. Ambrogio's conception and style betray themselves, however, in the sentimentally sweet, catlike face framed by the heavy wig, and in the fat, flabby hands.

From these school imitations it is a joy to come to Leonardo's rapid silver-point study for the angel in the Louvre picture (Royal Palace, Turin). With a few touches we have the transfiguration of an individual model into an apparition full of life and grace. The pose of the head is transitory,—next moment it will surely change; the big, half-mischievous eyes open upon us for a moment with that indescribable expression peculiar to Leonardo.

Preparatory drawings for the draped left leg and the drooped

1 Giovan Pedrino (Cook Collection, Richmond) has introduced Leonardo's kneeling angel into his picture of the *Nativity* and adopts several of Preda's modifications in this figure. He still keeps the pointing hand, but varies the position.

arm of this angel are to be found in the Windsor Collection. On the other hand, the popular drawings of chubby boys' heads (Louvre, Ambrosiana, and Windsor), which generally pass as Leonardo's studies for the Infant Christ and St. John, are probably not authentic, or at least, as Seidlitz has shown, they do not belong to the Louvre picture but to the London copy.[1]

Among the numerous early copies of the *Virgin of the Grotto* we need only mention the faithful but somewhat dark picture in the Ambrosiana, another at one time in the Weber Collection at Hamburg, and a third in the Art Museum at Copenhagen. The last-named work, probably by a northern master of the sixteenth century, is incomplete, the top of the composition being left out, but it is executed with great care.

A free imitation in the Louvre, known as *La Vierge aux Balances,* is probably modelled not only on the *Virgin of the Grotto,* but also on another work of Leonardo's which is no longer extant. We find traits here of some artist who stood in close relation to Leonardo during his first Milanese period, and, according to Frizzoni, the picture is a youthful work of Cesare da Sesto.[2] The Virgin is represented as seated on a stone within a rocky cavern with the Christ Child in her arms, while the angel, in the armour of St. Michael, bends forward holding up a balance (obviously an allusion to Christ's later mission of Judgment). On the opposite side are the head and arms of the aged Elizabeth. The engagingly pretty and winsome figures, the tiny naked boys reminding us of Romulus and Remus in some Roman relief, the slender angel, graceful as a classical fountain nymph, are hardly in the spirit of the master.

While the Florentine Leonardo's picture at Milan marked a change in the form of the *Nativity* from old modes of representation and gave the world a new type of pictorial composition, the tradition in Florence itself was more conservative. It is curious, for instance, to compare the long series of pictures on this theme by his colleague, Lorenzo di Credi, who scarcely modified the old formulas handed

[1] *See* Seidlitz, *op. cit.,* I, p. 169.

[2] *See* Frizzoni's article, "Opere di pittura delle scuole italiane nel Louvre," *L'Arte,* 1906. According to Amoretti there existed at Parma at the beginning of the last century, a picture by Leonardo containing the Madonna, the infant John, and St. Michael. It is said to have been signed and dated 1492. It has entirely disappeared; for several reasons it cannot be identified with the little picture in the Louvre.

Flemish Artist, XVI Century, Copy after "La Vierge aux Rochers"

Copenhagen

Follower of Leonardo, "La Vierge aux Balances"

Louvre

Giovan Pedrino, Nativity of Christ

Cook Coll., Richmond

Lorenzo di Credi, Nativity of Christ

Uffizi, Florence

down by Lorenzo Monaco and Fra Filippo, such as the kneeling Madonna worshipping the Child upon the ground while the angel holds a wreath of flowers over Him or supports the infant John. Credi's clear local colours in an intensely high key, the cool, sober manner of painting developed by fresco and tempera practice, the firm, plastic drawing, are characteristic of an age-long tradition in style which Leonardo's trenchant conception of the luminous envelope and the possibilities of a new technical process were to break away from entirely. The sense for organic compositional values in tone and for the elemental effects of light which underlie the new art, constituted a great step in the general development of Italian painting towards the end of the fifteenth century. The artist who made the most of Leonardo's acquisitions in this realm, was, of course, Correggio, past master of optical effects in illumination and depth of tone; but other painters as well, including Perugino, endeavoured as best they could to learn the new science. An example of this tendency is given in Perugino's *Nativity* in the National Gallery in London, betraying the influence of Leonardo in the formal composition,—notably in the central placing of the Virgin and in the triangular construction of the group.

A fainter echo of the centralized and symmetrical type of arrangement which we find in the *Virgin of the Grotto* appears in Raphael's pyramidal Madonna pictures, particularly in the *Madonna del Cardellino* (Uffizi) and the *Madonna im Grünen* (Vienna Museum). In both these examples, which unite the originally intimate character of the *Nativity* theme to a more monumental type of grouping, the Virgin sits with the two children placed well in the foreground while an endless vista and the sharply defined horizon make an effective contrast with the rhythm of rising lines in the figures. The whole scheme of effects and values differs entirely in each picture from the motives of Leonardo, and it would be going too far to trace any direct influence here back to the *Virgin of the Grotto;* for the younger artist had opportunities of studying other works by his great predecessor and the debt he owes is rather that of a gradual assimilation of formal ideas than of any close imitation of a specific picture.

* * * *

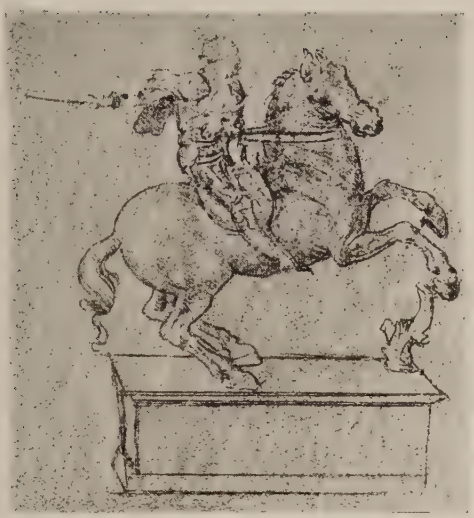
Still one more picture remains to be considered in this connection,—the so-called *Madonna Litta* in the Hermitage at St. Petersburg. Whether an original work, wholly or in part, or derived from a lost original, or belonging to an able follower (authorities differing on these points), this is one of the most delightful and flawless of Madonnas in its clear and appropriate expression of an inner nobility, dignity, and happiness. The Virgin, almost in profile, stands in front of a shadowed wall between two arched windows and holds the Child to her breast. Greedily sucking his mother's breast, with outward glance alert to miss nothing of his surroundings, he keeps tight hold of a goldfinch. Here is a bright, active, rather restless *bambino,* with his roguish, curly head and fat, sturdy little limbs, all the fatter for the foreshortening. He is twin brother to the more refined Christ Child in the *Virgin of the Grotto.* The Mother broods over the scene with lowered eyelids and a strange, faint smile, the clear-cut outline of her beautiful classic face in a halo of lights and shadows.

This Virgin's head, however, in spite of its exquisite features, suggests doubts as to Leonardo's authorship of the picture; for it seems too constrained for him, especially when we compare it with the preparatory study in the Louvre. This silver-point drawing on green paper is quite in the same style as the above-mentioned study for the angel in the *Virgin of the Grotto.* The face is more lifelike than in the painting, though the expression is less bright and more inclined to melancholy. The eyes are dreamy and the pursed mouth without the suspicion of a smile. The drawing has a quite simple but intimate and lovely portrait feeling. With this study before us we feel that this painting is hardly by Leonardo, painted, that is, entirely by his own hand. Is it, perhaps, one of the unfinished works, left blocked out to be completed by a pupil? The rather vivid tempera colours, as the red of the Virgin's dress and the light blue of her mantle, with the complete lack of chiaroscuro, are not characteristic of the master. In any case, however, the picture occupies an important place among the works of Leonardo's studio (being, at the least, in close touch with his art), and it marks a development of the thoughts and suggestions which we have seen in the inspired Madonna drawings of his earlier Florentine period.

Leonardo, Study for "Madonna Litta"
Louvre

Ambrogio Preda, Girl with Cherries
Metropolitan Museum, New York

Leonardo and Pupil, "Madonna Litta"
Hermitage, St. Petersburg



Leonardo, Drawing for the Sforza Statue

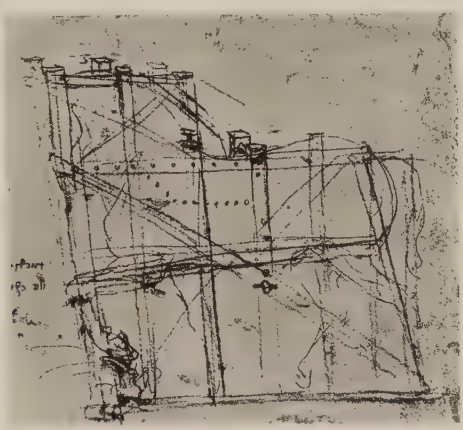
Royal Library, Windsor

Pollajuolo, Drawing for the Sforza Statue

Printroom, Munich

Leonardo, Drawing for the Sforza Statue

Royal Library, Windsor



Leonardo, Study for the Casting of the Horse

Royal Library, Windsor

VII

THE EQUESTRIAN STATUES. DECORATIVE PAINTINGS IN CASTELLO SFORZESCO

The appreciation of the *Virgin of the Grotto* is proved by its purchase from the confraternity, and we can see that Leonardo gave himself up to it with all his strength. But a still more arduous undertaking was now to test his mastery in another craft. This was the commission for the "bronze horse," the equestrian statue "to the immortal honour of the Duke's father and an imperishable monument to the whole house of Sforza" mentioned at the end of the letter, already cited, which Leonardo is thought to have addressed to Il Moro shortly after his arrival at Milan. We can well believe the glory of his house meant more to the Lombard prince than the irrigation of his territories, or novel war-engines, or even the portraits of his mistresses. And painters, of a sort, were abundant enough, while sculptors capable of the desired monumental work were rare. Verrocchio being engaged upon the Colleoni statue for Venice, there remained but two sculptors in Florence who seemed available: Pollajuolo, famous on the technical side of the art, and Leonardo, whose capacity in sculpture was perhaps less attested but was in evidence and who was presumably competent for the task in view of his prodigious initiative in other fields. We at least know that the two masters were considered at one time as alternative candidates until Leonardo's artistic pre-eminence became manifest, and his engineering skill helped to tip the balance in his favour.[1]

The idea of erecting a statue to Francesco Sforza, the mighty condottiere who finally became the Duke of Milan, had already been mooted during the time of Lodovico's predecessor, Galeazzo Maria;

1 The fullest account of Leonardo's equestrian monuments has been given by Mueller-Walde in the *Jahrbuch der kgl. preuss. Kunstsmlgn.*, 1897; but in spite of the great merits of the article in comparison with previous treatments of the same subject, it does not seem to us that this author has succeeded in assigning the sketches so as to set forth the history of the two different statues quite clearly in every particular.

but, as far as we know, it had not yet assumed artistic shape. However, when Il Moro came into power he seems to have regarded it as one of his most important missions in the sphere of art to promote the execution of this monumental plan.

It is possible that he arranged a competition for this purpose, for besides Leonardo's drawings for the Sforza monument there is a large study by Antonio Pollajuolo in the print-room at Munich which evidently relates to the same work. For this view we have the authority of Vasari, who in his life of Pollajuolo writes that "there were found after his death drawings and a model for a statue of the Duke of Milan, Francesco Sforza; there are two of these studies in our books of drawings. In one of them he [the Duke] has Verona beneath him; in the other he is represented armed to the teeth. I have not been able to ascertain why these studies were not brought to execution." To us the reason is apparent, when we compare Pollajuolo's drawing with Leonardo's; it could hardly have been possible at any period for the superiority of the younger competitor to escape the eye of an impartial judge.

The history of the monument is still rather obscure. Both as regards the initial stage of the undertaking and its later development we are left to the scattered statements of contemporary authors and to Leonardo's drawings, which in this case are particularly difficult to arrange, seeing that he made preparatory studies for two different equestrian monuments, one to Francesco Sforza, the other to Gian Giacomo Trivulzio. Although the studies saw the light at different periods of time, they form to a certain extent parallel series, exhibiting a similarity of motive in consequence of which they are often confounded.

We are surprised that Pollajuolo (superb as he could be in interpreting the anatomical structure of the human body) should have made his galloping war horse such a stilted wooden hobby, so tame and clumsy, so inferior to Leonardo's studies or to Verrocchio's charger at Venice, even though the posture be that adopted by Leonardo, with some faint reflection of classical models.

As the composition closely resembles Leonardo's earliest equestrian studies, the Pollajuolo drawing probably dates as far back as the early eighties, and it is thus difficult to banish the thought of a direct or indirect competition between the two artists. In any case,

we cannot agree with Mueller-Walde's assumption that Pollajuolo did not make his drawing before 1489, when he is said to have been summoned by the Duke who distrusted Leonardo's ability to cast the model in bronze. The Duke's temporary misgivings as to Leonardo's technical skill are mentioned in a letter from the Florentine ambassador in Milan, but there is no real reason why Pollajuolo should then have made an entirely new sketch. Moreover Pollajuolo at the time stated was engaged on some great work for the Pope in Rome, which certainly did not leave him leisure to plunge into a new monumental task.[1]

The central point in all Leonardo's studies for the equestrian statue is the horse, its posture and action. In contemporary documents the work is, in fact, simply known under the name of "il cavallo" and is compared, for instance, with the Greek horses on Monte Cavallo. Painstaking as ever, the draughtsman must first think out his problem in the nude, a horse and rider without clothes or trapping to conceal movement and muscular action. Thus in one of the finest Windsor drawings a naked man rides bareback, his knees pressed desperately close to keep a seat, trying his best to rein in his steed which is madly galloping over a fallen warrior. With the simplest means, in rapid silver-point contours and parallel shading, the objects are modelled and defined as if in metal; the highest pitch of animation is reached in the dash, the supple interplay of muscular strain between horse and rider,—a tension more than visible, for we react to it in our own muscular memories and potentials. The greenish blue tone of the paper serves to produce the impression of old bronze. Note-book entries show enthusiastic study of the problems involved both in theory and experiment. The artist picks out beautiful animals: "Messer Galeazzo's big Spanish cob." (Galeazzo da Sanseverino was married to Duke Lodovico's natural daughter, Madonna Bianca, and owned a magnificent stud of horses.) He revels in details and "points": "Messer Galeazzo's Sicilian horse . . . the measurements of the Sicilian horse; the hind leg lifted and outstretched" is his explanatory note to a drawing. "Messer Mariolo's Morel, a Florentine, a powerful horse with a fine neck and a really

[1] According to Maud Cruttwell, "Antonio Pollajuolo," the artist, was summoned to Rome by Pope Innocent VIII as far back as 1484.

beautiful head." . . . "The falconer's white stallion has beautiful hindlegs." . . .

The jottings are illustrated by numerous detailed studies of the heads and different muscular parts of the horses, mostly black-chalk drawings belonging to the collections at Turin, Budapest, and Windsor. And, indeed, it was doubtless the work on the equestrian statue that suggested the treatise on the anatomy of the horse which Leonardo is asserted by Vasari to have drawn up; though we must not forget that he made special studies of horses also at a later period in connection with the big battle-piece for the council hall in the Palazzo della Signoria at Florence.

In another sketch, likewise on bluish paper, the artist makes more direct studies in preparation for the final execution in bronze. The horse is again represented rearing on its hind legs, wildly galloping, but under one of its fore legs is placed a tree trunk; the rider, clad in full armour, stands upright in his stirrups, straining every muscle of his legs, and violently swinging his bâton of command while he reins in the fiery animal with a grip of steel. It is the very embodiment of the commanding marshal. His will, expressed in pose and gesture, dominates not merely the horse, but legions.

This bold monumental design with the imposingly strained and concentrated movement was probably also executed in plastic material; for we find it substantially reproduced in four small contemporary engravings, which can hardly have been made directly from Leonardo's drawings, but rather from small wax or bronze models. Plastic models would, of course, have been necessary in order to give the Duke a clear idea of the artistic effect of this entirely new composition. Vasari confirms our assumption by informing us that Pollajuolo made such a model. It is not equally certain that the Duke Lodovico was really satisfied with this composition. It was, perhaps, at bottom too bold, too new, to inspire confidence in the artist and an assured hope for a successful result. No equestrian statues had hitherto been seen with anything like so free and violent an action. Both ancient and modern bronze riders, the *Marcus Aurelius* in Rome, the *Regisole* at Pavia, Donatello's *Gattamelata* at Padua, and Verrocchio's newly finished model for the Colleoni statue for Venice (merely to mention the most prominent examples), steered their horses at a slow pace, with three or four of their feet resting on the

Equestrian Statue from the Sepulchral Monument of Paolo Savelli in the Frari-Church, Venice

Donatello, Gattamelata's Statue
Padua

Small Bronze Horse, Suggested by Leonardo's Model
Andre Coll., Paris

Verrocchio, Colleoni's Statue
Venice

in Chicago Art Institute

pedestal. Following in the wake of Roman antiquity an equestrian monument had not during the earlier Renaissance period been considered as a form of expression fitted for violent movement and strain. It was rather a subject to be treated with a serene breadth and an imposing monumental gravity. In fact, the painted and sculptured horsemen executed during the early Renaissance, were, to begin with, mostly sepulchral monuments; their place was in the churches or in the mortuary chapels [splendid examples are seen in the Frari-church in Venice], and even when they were moved out into the square in front of the church, like Donatello's *Gattamelata,* the air of a sepulchral memorial nevertheless still clung to them. Donatello's famous statue is a classical apotheosis to an Olympian, executed with compelling force. Its magnificent effect is due less to the master's naturalistic power of characterization than to the heroic air, the grandeur, and the glory that pervade the whole conception. The movement is entirely subordinated to the calm effect of mass.

Verrocchio emancipated himself to a certain extent from the ancient tradition. To him the essential matter was no longer the Olympian serenity, the breadth, the static effect of mass; he made no idealizing apotheosis by which the commanding general was elevated among demi-gods, but a realistic representation in which rapacious imperiousness and tense will-power are emphasized. Specific features, pose, and action are stamped in the utmost degree with the impress of living reality. Every sinew is strained, every vein pulsating with energy; but the movement is curbed, dominated throughout by the defiant will of the rider. It is the gathering up, the focussing, rather than the mature development of the commander's will-power that is here represented. The artist has calculated for his effect not on a sudden liberation of dynamic energy, but rather on the haughty self-restraint of the rider and his passion.

In Leonardo's earliest designs the action bursts all bounds. The whole problem is, as it were, lifted to a new plane by the rejection of the static and formal considerations which had hitherto held sway in the composition. The pent-up energy is allowed to break forth quite unshackled by outward conditions. With a horse rearing on two legs and a rider swinging out his arm to its full extent, it is hardly possible to go further in giving free expression to dynamic movement.

These bold compositional innovations naturally involved many difficulties for the final execution in bronze, particularly at an epoch which knew nothing of that disregard for the convention of repose in plastic monuments which characterizes the baroque period, as well as many monuments of the nineteenth century. Formal balance was certainly to be found in Leonardo's design; but the dimensions of the work were such as to make it hardly possible to calculate with certainty whether the bronze colossus could carry out statically the great intention of the sketch. Moreover, Leonardo had envious rivals who doubtless lost no opportunity to thwart his bold plans and to insinuate to the Duke that the huge model could not possibly be cast in bronze. Nothing like it, they said, had hitherto been attempted,—the casting must inevitably end in a fiasco if it were carried out in accordance with Leonardo's plan. "Da tutti fu giudicato impossibile, perche voleve gittarlo di uno pezzo!"[1] A certain lack of confidence on the part of the Duke was probably one of the reasons why the work on the equestrian statue came to a standstill at the end of the eighties.

In 1490, however, the work was recommenced. Leonardo then jots down in his note-book: "On the 24th of April I began this book and also began the horse afresh."

In the meantime something had happened to compel a change of plan. Lodovico's fear to countenance a radical departure from traditional modes, his want of entire loyalty to an artist whom he could respect better than he could understand, is the most probable reason for the change. Moreover, opportunity had come to Leonardo of studying an ancient equestrian statue, the only one of its kind at that time preserved outside of Rome. It stood in front of the Cathedral at Pavia, and was generally known under the name of *Il Regisole,* a corruption of "re Gisulf," the name of the king of the Goths whom it was supposed to represent. The statue, which was entirely gilded, had originally been erected at Ravenna, but had been removed to Pavia. When Leonardo in 1490 visited the little university town, he made several studies of it and jotted down the following lines about it:

[1] The expression taken from "Il Libro di Antonio Billi," is repeated with certain variations by other writers.

In the one at Pavia the movement is the most admirable thing. It is more admirable to copy ancient things than to imitate modern. Beauty and utility cannot be combined, as may be seen in fortresses and in human beings. The trot is almost like that of a free horse. Where natural animation is lacking, one must add artificial.

The Roman statue at Pavia was destroyed by the French in 1796 as involving a glorification of monarchy, and we are thus no longer in a position to compare Leonardo's judgment with the object to which it refers. It would seem, however, that he was obliged, whether he would or no, to look upon the ancient work as in certain respects a model for imitation. What he deemed beautiful the Duke, perhaps, did not deem practicable; this may have been a reason for his now conforming to antiquity. But it was equally clear to Leonardo that animation and movement must be added. The sketches and free studies from the *Regisole* statue witness a strange conflict of ideals in the chastening of his earlier thought by the classical form so reluctantly adopted. In the end he adopted a severer design, without doing violence to the creature of his imagination; but he struck out on the new path with rather faithful copies of the antique motive, as we see in several sheets in the collection at Windsor. The heavy, rather low horse with thick neck and small head is now represented at a walking pace, while the rider sits stiffly with one hand raised to the horse's neck, much as in Donatello's *Gattamelata.* The artist, however, endeavours in a drawing immediately below the copy to relax the stiff posture. The rider here turns in the saddle to issue a command to someone behind, and at the same time points with his bâton over the horse's neck. The horse shows a concentration of movement.

On another Windsor sheet we once more find the *Regisole* horse with its long flowing outlines, but on the same sheet it is transformed into something quite new. Reined violently in, the horse stops its pace suddenly, the neck arched in a huge curve, the mouth pressed to the chest, the hind legs doubled, one fore leg planted on the ground, and the other raised. He is just about to rear, and the motive is entirely realized in the following studies.

The *Regisole* pattern can no longer hold the artist in. His vision must have its due, alongside of the most painstaking interpretation of the ancient design. Horse and rider are set free, all the lines are curved and concentrated, the whole composition is a whirling storm

of action and movement. We recognize the motive with the rearing horse on its hind legs, but it is treated with far greater energy than in the earlier sketches. The horse is, indeed, careering over a fallen man, who, in desperate fear of being trampled to death, kicks out with all his might at the horse's belly. The rider tugs at the reins, pulling down the horse's head, and swings his club to kill the fallen man. His movement is so violent that one asks whether he will be able to hold himself in the saddle.

Above and below this riot of lines, we see sedater studies from the *Regisole* horse, besides a smaller drawing in bistre, which represents a fairly restrained variation of the commanding-general motive. The horse is now linked to the ground by a tortoise and a toppling urn. The bareheaded rider, with armour and a mantle, points straight out with his bâton. He is an old man of quite different type from the plump-cheeked Francesco Sforza, who is represented in Pollajuolo's drawing with the fidelity of a portrait. This study was thus, in all probability, intended for Leonardo's later equestrian statue, the Trivulzio monument and was probably executed at another period than the black-chalk drawings on the same sheet. As we have already pointed out, it is a very delicate matter to classify Leonardo's studies for the two different monuments, inasmuch as similar motives occur within both groups. It is not impossible that the *Regisole* studies did not assume paramount importance before he started to work at the Trivulzio monument. However, it should be observed that the slowly pacing horse supporting one of its fore legs on an urn recurs in a red-chalk drawing, which possesses a special interest, owing to the fact that the model of the horse is here represented surrounded with beams and crosspieces, these being probably a preparation for the final casting, or for some transport of the model. The casting of the Sforza monument was actually planned in 1497. Leonardo made careful studies for the casting moulds and the smelting furnaces, four of which were required to melt 200,000 libra, or nearly 80 tons of bronze for the horse alone. The rider was to be afterwards cast in a separate form.[1]

[1] On the ground of a few lines in Pietro Lazzaroni's description of the festivities at Bianca Maria Sforza's marriage to the Emperor Maximilian in 1493, a number of authors have assumed that Leonardo's model was then finished, and was erected under a triumphal arch in the court at the Castello Nuovo. This, however, is due to a misunderstanding of

Leonardo, Studies after the "Regisole" Statue in Pavia

Royal Library, Windsor

Leonardo, Studies Partly Suggested by the "Regisole" Statue

Royal Library, Windsor

Waiving the technical difficulties of bronze-casting on a large scale with the methods of the time, it will be clear from a study of the drawings for the two equestrian statues taken in connection with those for the *Battle of Anghiari* of a later date, that Leonardo was fascinated with the problem of a plastic representation of equine movement as a type of animal strength and grace, under discipline, yet with a dramatic contrast to the human will of the rider. If the master approached this problem from the naturalistic viewpoint in order to give to the motive every advantage of science, he was only following out a consistent principle of his whole art theory and practice. Since the fifth century B. C.—since the horses of Helios on the Parthenon pediment—there had been no thoroughgoing application of the actual beauty of animal movement to monumental sculpture; and with the Greeks, of course, no complete research into the inner anatomical springs of such action had been essayed. Leonardo's studies in this particular field are easily, in their application to art, the greatest of their time, and his conception of a large bronze group embodying the utmost degree of vital energy at some supreme dramatic moment is hardly to be condemned as an unrealizable ideal.

* * * *

Leonardo had now for a decade and a half devoted himself to the problem of the Sforza statue. He had executed at least two different models for horses, and had bestowed an enormous amount of labour on the study of all the theoretical conditions—anatomical, mechanical, and technical—connected with this matter, but after all it was never vouchsafed to him to complete it. The final ruin of the great project was connected with the violent convulsions of which Milan was the scene during the closing years of the fifteenth century. As the master's subsequent fortunes were determined by these internal changes, we must consider for a moment the course of political events.

On the 21st of October, 1495, Lodovico had been proclaimed duke, after the lawful heir to the throne, the Duke Gian Galeazzo, had pined to death when only twenty-five years of age. The Emperor Maxi-

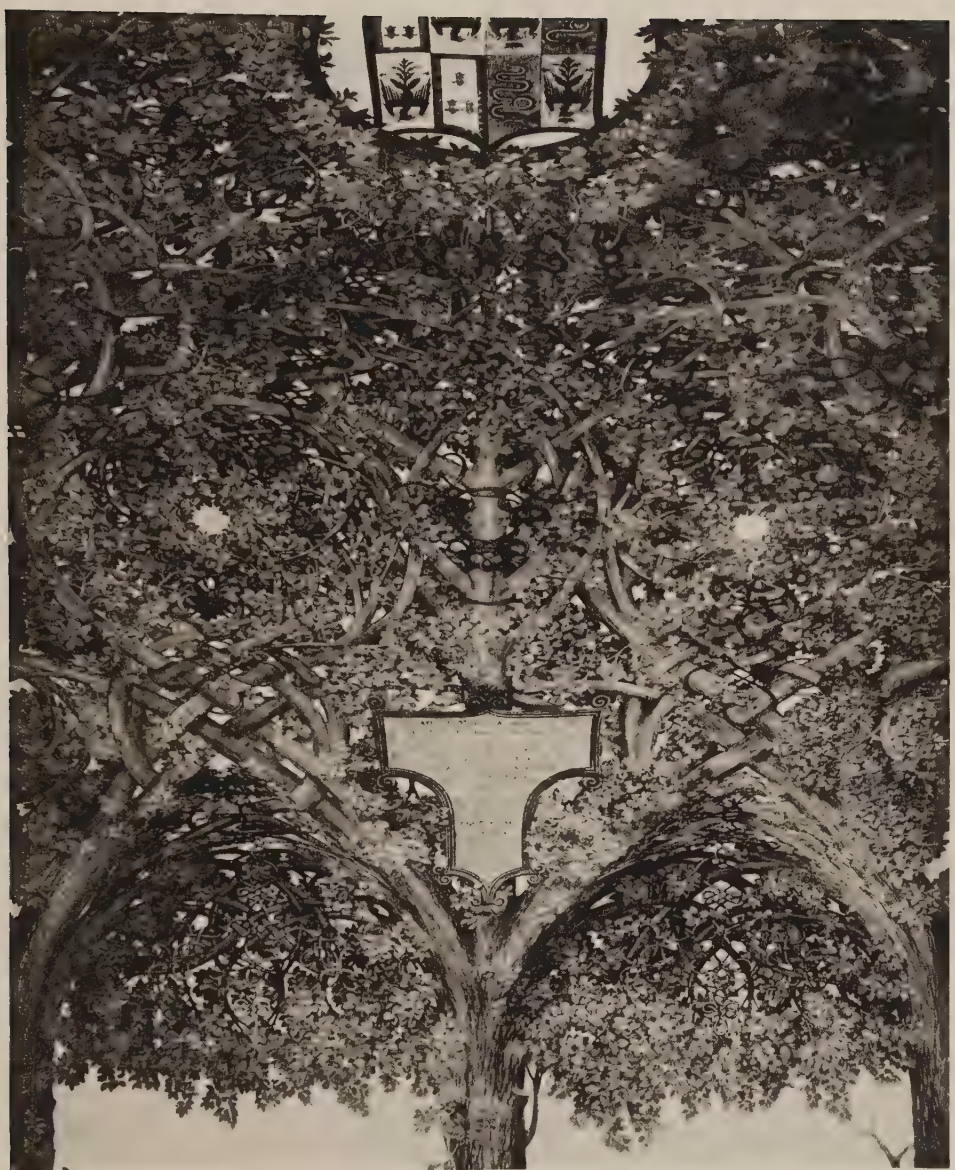
Lazzaroni's words; Mueller-Walde has clearly proved that the equestrian statue in question was painted on cloth and mounted over the entrance gate of the Castle. Leonardo's clay model, which was about twenty-four and one-half feet high, would have been far too brittle to be transported.

milian had sanctioned this investiture in return for a large sum of money and the hand of Lodovico's niece. Now ensued a period of greater brilliancy and pomp than was ever before known in the court of Milan. But after scarcely more than a year on the real throne, on the 2d of January, 1497, Il Moro lost his young consort, Beatrice d'Este, who by her undaunted spirit and activity and her daring ambition had been a prop and a spur to him during his days of prosperity. Lodovico expressed his despair to the Ferrarese ambassador, and besought forgiveness for not having bestowed on "this faithful companion all that she merited."

As time went on, political events became more and more awkward for the Duke of Milan, and more and more taxed his resources. Every atom of strength and all possible funds had to be got together for diplomatic intrigues and strengthening of defences. Artistic enterprises suffered, and artists seem often to have had difficulties in obtaining their salaries. Some imperfect drafts of letters from Leonardo (in Codice Atlantico, reproduced in Richter, Vol. II, Nos. 1344 to 1345), in all their brevity, throw considerable light over these affairs. In one of them he gives vent to his annoyance in having been referred for payment to the yield of canal-works and the like instead of receiving his promised salary. "It grieves me," he writes in another letter, "that in order to procure the necessary subsistence, I have been compelled to interrupt my work and occupy myself with trifles instead of carrying out the task entrusted to me by Your Highness. But I hope shortly to have earned so much that I may carry it out undisturbed to Your Highness's satisfaction, to whom I herewith commend myself. If Your Highness believes that I possess money, Your Highness has been misled. I had to maintain six men for six months and received only 50 ducats."

A sharper note of dissatisfaction is struck in another letter, of which only fragments are extant (the paper having been torn in two):

If other commissions are given me by . . .
Remuneration for my services . . .
I can do nothing . . .
with assignments (of benefices?) . . .
It is not my art, I wish to leave it . . .
I am aware that your Excellency is far too occupied for me to venture to remind you of my small matters, and that the arts have been put to silence . . .
but my silence might occasion your Lordship's wrath . . .



Decoration of Branchwork in Sala delle Asse

Castello Sforzesco, Milan

My life in your service . . .
I hold myself prepared to obey . . .
Of the horse [the model for the statue] I will say nothing, for I know that the times are bad . . .
to your Lordship that I still have to receive two years' salary . . .
Two skilled workmen are in constant occupation at my expense . . .
Important works which I could show those who come to see . . .
now I do not know what I can spend on my works . . .
I have worked to gain my livelihood . . .
not having been informed what it is, I now find myself . . .
remind you of the commission to paint the rooms [camerini] . . .
representing that of your Lordship I merely request . . .

These fragments of letters, probably to be dated towards the close of the year 1497, undoubtedly leave the impression that differences had arisen between the Duke and Leonardo, although the real cause and extent of this rupture are unknown.[1]

From the latter letter, however, it seems apparent that the dissension was somehow or other connected with the commission to execute the decorative paintings in certain rooms in the Citadel. We know that the Duke carried on negotiations with the Baglione at Perugia to obtain the services of Perugino, for the execution of certain works at Milan. Possibly the intention was that Perugino should complete paintings which Leonardo had abandoned in consequence of the disagreement. As a matter of fact, however, Perugino never came to Milan, and a reconciliation took place between the Duke and Leonardo, who resumed his work at the paintings in the *camerini* of the Citadel.

From some statements of the Duke's accountant, Messer Gualtiero, we learn that he was painting in the Palace chambers in March and April, 1498; on the 23d of April the scaffolding for the plastering of the vault was removed from the Sala delle Asse. In this hall was executed from Leonardo's designs a magnificent decoration of branchwork and leafage, ramifying from thick trunks and extending over the greater part of the walls and ceiling. The branches entwine and are bound with golden threads, forming geometrical loops against the green foliage; and there are four plates with inscriptions and with the ducal arms. The whole effect is like that of a gigantic

1 *Cf.* Mueller-Walde's article, "Beitrage zur Kenntniss des Leonardo da Vinci," in *Jahrbuch der kgl. preuss. Kunstsmlgn.*, 1897, pp. 112ff., also Seidlitz, *op. cit.*, pp. 251ff., and Emile Moeller, "Leonardo da Vinci's Entwurf eines Madonnabildes für San Francesco," etc., in *Repertorium fur Kunstwissenschaft*, 1912.

pergola with its darkling leafy canopy against the sky. It is to be regretted that this unique decoration was heavily repainted after it had been freed from the plaster at the end of last century.

When we think of the artist's strenuous studies of anatomy at this time, and of his mastery of the figure in action, the capacity to invent a scheme of decoration in the spirit of the purest delight in the plant world brings Leonardo near to us of the North; for the decoration at once recalls the exuberant foliage of Gothic sculptors, while it in no way imitates the Gothic style or strikes us as in any way exotic to Italian precedent. There is, however, no Italian precedent for the form—it remains unique. Doubtless enlisting less of profound study than of blithe recreation over dainty devices, we must admit an entire freedom from the usual tendency of Italian conventional ornament towards pseudo-classical trivialities. Here, as so often, we are reminded of Oriental design in its most naturalistic aspects. [The spirit, but not the form, of Leonardo's scheme, may be felt in the early painting of India, as in the foliage ornament in the Ajanta caves.]

Leonardo seems to have remained at Milan till the close of the year 1498, in spite of the bad times. Then, however, the thunderclouds of war became menacing and it was evidently no longer possible to proceed with any artistic work. The French were on the way to Lombardy. The Duke made feverish efforts to place himself in security, but at the decisive moment his allies deserted him. He then repaired to the Tyrol in order to collect an army. During his absence the Milanese opened their gates to the enemy. (October 6, 1499.) Six months later, to be sure, the Duke succeeded, by dint of intrigues and the aid of his friends, in recovering possession of the city but within a few months the French made a fresh attack, completely crushed the Duke's mercenary army, and carried Lodovico himself as prisoner to France, where he died in prison in 1510.

When Milan finally fell into French hands, destruction threatened Leonardo's great work in sculpture which it had taken him so long to produce. One might expect to find a note of anxiety or regret in his jottings, but the only hint of his personal relation to the political changes is the following: "The pen must needs join the pen-knife; the one is not worth much without the other . . . the buildings of Bramante. . . . The castellan taken prisoner. . . . Visconti carried

off and the son afterwards killed. . . . Gian della Rosa [the court astrologer], his money stolen. . . . Borgonzo [the treasurer] began and would not, and therefore fortune deserted him too. The Duke has lost the State, his possessions, and his liberty, and none of his works have been completed. . . ." These last words are poignant, but the disaster was too complete for vain regrets.

Now that the French mercenaries were rioting freely in Milan, it was not to be expected that Leonardo's fragile clay model of the Sforza statue should receive proper protection. Even if it was not shot to pieces by Gascon archers, as Vasari reports, it must soon have disintegrated, perhaps quite as much owing to the damp climate as to injury at human hands. The last news we possess as to the model dates from September, 1501, when the Duke Ercole d'Este wrote to the French King's representative at Milan, the Cardinal of Rouen, requesting his permission to make use of it for a statue which was to be set up at Ferrara. To this request he received the following reply:

> As to the model of the statue which was erected by the Duke Lodovico, His Excellency would willingly, as far as it lay with him, consent to its transport, but as His Majesty himself has seen the statue, His Excellency does not venture to grant this request without having first obtained His Majesty's opinion on the matter.

After this we hear nothing further about Leonardo's great work. But this did not mean that the artist's interest in the subject was at an end. He had once for all endeavoured to express his ideas in drawings and plastic sketches; some of these he must doubtless have retained, and it was thus easier for him, when an opportunity was once more offered him some years later to execute an equestrian work, to develop the problem still further, and to execute designs which to a certain extent carry forward the studies for the Sforza monument.

* * * *

This opportunity probably occurred in connection with Leonardo's abrupt summons from Florence to Milan in May, 1506, when a certain influential person succeeded in procuring a free passage for Leonardo from the usually mean and jealous Florentine Signoria, on the bare statement that he desired "certain plans" from the artist's hand. Whether this person was the recently appointed French

governor of Milan, Charles d'Amboise, or the commander-in-chief of the French army, the Marshal Gian Giacomo Trivulzio, we do not know, but in any case it cannot have been long after Leonardo's arrival at Milan before the commission for the Trivulzio monument assumed substantial form. The commission in a way proved to be a kind of compensation for the unfinished work on the Sforza statue; though, of course, it did not proceed from any nice regard for the artist, but only from Marshal Trivulzio's endeavour to eclipse in every way his defeated and banished rival. The monument was probably intended to be erected in the Duomo, the worthiest spot for the ruler of Milan "in spe." The haughty marshal, however, found his last resting place beneath a far plainer memorial in San Nazaro Maggiore.

The main interest in Leonardo's fresh project, as shown in the drawings, attaches to the equestrian statue which was to crown the whole. He appears to have started out anew on his boldest scheme. The horse, careering over a fallen enemy, is full of spirit and fire, and the general is in full action with his huge bâton of command. The pedestal is fashioned into a pillared and arched *ædicula* to contain the sarcophagus. Steps lead up to the podium on which the sarcophagus rests, the whole pedestal being of considerable height, and bearing a certain affinity to that of Verrocchio's *Colleoni*.

In other pen-sketches we find indications that the artist had had thoughts of placing captive figures seated on a ledge just below the horse. This project inevitably suggests Michelangelo's slaves in the Sistine Chapel, or the prisoners he planned for the sepulchral monument to Pope Julius. It is true that Leonardo's monument was to a warrior, Michelangelo's to a Pope, but, in accordance with the taste of the time, both sought the most forcible forms of expression to glorify the deceased worthy and to emphasize his dignity and might, by introducing captive prisoners at his feet, Leonardo's compositional idea was in fact adopted by several later sculptors, for example, Pietro Tacca and Andreas Schlyter.

Further light is thrown on Leonardo's project for the Trivulzio monument, by the estimate of its cost which is reproduced in the Codice Atlantico. A few extracts will serve to give the reader an idea of its importance and of the composition.

Leonardo, Study for an Equestrian Monument (Trivulzio?)
Royal Library, Windsor

Leonardo, Studies for the Trivulzio Monument

Royal Library, Windsor

Messer Giovanni Jacomo Trivulzio's sepulchral monument.

The costs for the material and the execution of the horse. . . . A battle horse in natural size with rider will require for the cost of the metal 500 ducats. . . . Costs for the iron work to be inserted in the model, for charcoal and wood, for the pit in which it is to be cast, for the mould and for the furnace in which it is to be cast, 200 ducats. . . . For making the model in clay and then in wax, 432 ducats. . . . To the workmen for polishing it when it is cast, 450 ducats. . . . In all, ducats 1,582. Costs of the marble of the sepulchral monument. [Under this heading are entered, exactly specified, all the architectural parts to be used in the pedestal and for the material of the statue.] Total in all, ducats 389. Cost of the sculptural work in marble. . . . Round the horse's base are 8 figures, each at a price of 25 ducats = 200 ducats. And on the same base are 8 festoons with certain other ornaments; 4 at a price of 15 ducats apiece, and 4 at a price of 5½ ducats apiece = 92 ducats. Further prices are entered for the work on 13 ells of cornice, 12 ells of frieze and architrave, 8 fluted columns together with capitals and bases; reliefs with figures and trophies, 150 ducats; the profiling of the sarcophagus, 40 ducats; the statue of the deceased, "to do it well," 100 ducats; 6 harpies with candelabra at 25 ducats apiece, and finally for the profiling of the base, 20 ducats. The whole sum under this heading amounts to 1,075 ducats.

The monument in its entirety was to cost 3,046 ducats, or nearly twice as much as was paid for Verrocchio's Colleoni statue. It should be borne in mind, however, that about half the costs were calculated for the richly decorated pedestal with the sarcophagus and the statue of the deceased.

The sketches and the estimate of costs show plainly that the pedestal was to consist of eight fluted Corinthian columns, placed on a high base and carrying a richly elaborated entablature, with a frieze adorned with reliefs around the projecting roof-plate; with a figure (a prisoner?) in front of every column and open arches between, through which the sarcophagus and the statue of the deceased were to be visible. Round the sarcophagus conventional harpies and candelabra were planned for. But the grandest and most essential part of the whole composition was the equestrian statue in life size, which, as we believe, was at first conceived as wild and unrestrained, with the horse careering over a fallen foe.

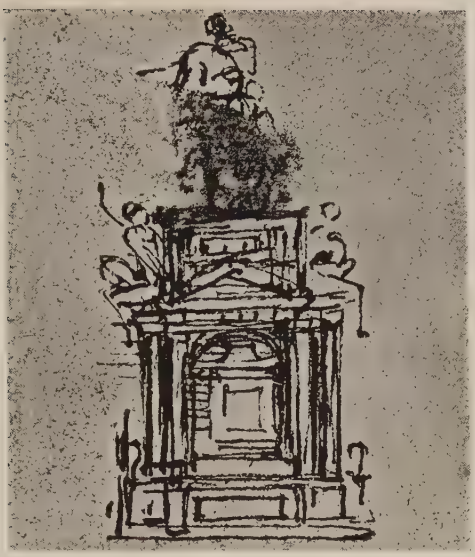
Whether it was due to artistic misgivings or to a desire expressed on the part of the commissioner that Leonardo once again abandoned the thought of the galloping rider, we do not know; but it seems scarcely probable that the artist quite voluntarily relinquished a plan which was evidently the embodiment of a conception deeply rooted in his whole nature. As a whole, however, the com-

position of the monument would seem rather to have gained by the change; the rhythm of the lines became softer and more uniform, the whole effect of the lines more imposing. The rider is no longer the unscrupulous conqueror galloping in wild career over his enemies, but the steady, calm, majestic commander of the issues of battle.

We see him typically represented, for instance, in one of the most beautiful sheets at Windsor, originally drawn in red chalk, the horse and rider being afterwards drawn over and partially altered with pen and bistre. The general, armoured and bare-headed, stands upright in his stirrups, his legs wide apart, the upper body thrown back a little, as in Verrocchio's *Colleoni*. The hand with the bâton is held over the horse's neck, the lines of man and horse being thus united. The rhythm is drawn out into a *tempo mæstoso,* without any such forced movement as in Verrocchio's composition. The large animal is more powerful in relation to the man than in the Venetian statue, and there is less emphasis upon the connection of the bodies. No attempt has been made here to blend together man and horse in Centaur fashion, and for monumental effect the horse plays the more important rôle. It was this part of the task which most fascinated Leonardo, and was the object of his most careful studies. The rider was evidently meant to be merely the complement, composed with reference to the animal, a point of junction for the sweeping, quietly rippling play of the lines in the composition. However, it was also probably Leonardo's intention to emphasize the rider by an energetic characterization in detail.

But the Trivulzio monument was apparently never carried out even so far as the Sforza statue was. The times become still more unsettled, and the artist was even more occupied with other matters (particularly with practical engineering work) than when he was engaged in Lodovico's service. Moreover, he was soon compelled to leave Milan in order to look after his interests in a lawsuit at Florence, and when he afterwards returned (in the summer of 1508), a certain hesitation on the part of the commissioner seems to have made itself felt, for Marshal Trivulzio's personal influence was now considerably impaired.

Although none of Leonardo's monumental projects in sculpture were carried to complete execution, this by no means implies that they were unimportant for the development of art. Models, at any



Leonardo, Study for the Trivulzio Monument

Royal Library, Windsor

Leonardo, Marshal Trivulzio on Horseback

Royal Library, Windsor

Leonardo, Study for an Equestrian Monument (Trivulzio?)

Royal Library, Windsor

Small Bronze Statuette from the Beginning of the XVI Century, Suggested by Leonardo's Sketches

Harding, London

Paduan Artist, End of XV Century
Bronze Statuette

Museo Nazionale, Florence

Paduan Artist, Beginning of XVI
Century Bronze Statuette

Pierpont Morgan Coll.

rate, of different kinds and sizes had been executed, at least for the earlier of the two statues, and Leonardo's compositional intentions had, as a whole, been clearly enunciated; contemporary artists had an opportunity of following the work in its earlier stages. The "cavallo" was, moreover, a work of such grandiose dimensions that it aroused the wonder and kindled the enthusiasm not merely of artists but of all who had the good fortune to see it. Poets sang its praises in Latin odes; princes expressed their desire to be honoured with similar creations.

As far as we know, there are no extant copies made directly from Leonardo's large "cavallo," but several statues and small bronzes exist which owe their inspiration to his drawings and sketches. The most remarkable among these is the bronze statuette now belonging to Mr. Harding of London, formerly in the Taylor Collection; it was of course reproduced in the sale catalogue but has, as far as we know, never before been used in illustrating the history of Leonardo's equestrian statues.

This small bronze, which is of unusually fine quality, represents a bare-headed rider with waving mantle on a galloping horse. The raised hand has evidently held a lance with which the rider was aiming at the fallen naked man who is wildly struggling under the horse's fore legs, kicking the animal with his knee, and thereby offering a support in the static composition. The contrast between the crushed enemy and the infuriated rider is compelling; the whole group—men as well as animal—is imbued with a seething energy, but at the same time the composition is well knit and entirely fitted for execution on a large scale.

Although there is none of Leonardo's extant drawings which corresponds exactly to this, it is very likely that the bronze reproduces one of his earlier projects for the Trivulzio monument. There are many points of likeness with one of the Windsor drawings for this composition, and the rider is unmistakably a portrait of Marshal Trivulzio. But whether Leonardo himself actually executed the bronze must remain a matter of conjecture; possibly the casting was done by somebody else from the master's wax model. The statuette is in any case the most faithful reproduction—in plastic material—of Leonardo's equestrian compositions.

The rearing horse, with or without a rider, is the motive of

several other small Renaissance bronzes which stand in a less direct relation to Leonardo's sketches. Thus there is in the National Museum of Florence a splendid Paduan bronze from the end of the fifteenth century called *il cacciatore* (the hunter), which shows a wildly galloping horse of a very bold and broad build with a boy on its back. The figure of the boy is rather cursorily sketched and lacks organic connection with the animal, but the horse is magnificent in form and movement.

Better connection between rider and horse is manifest in a somewhat later Paduan bronze in the J. Pierpont Morgan Collection. The animal reminds us here very much of Mr. Harding's bronze, though its movement is not quite so fierce, perhaps because the fallen warrior under the fore legs is left out. Instead of the fighting marshal is substituted an athletic nude man who with his right hand grasps the mane of the horse in order not to slip off. Still other variations on the same motive are extant, for instance in a bronze statuette in the Victoria and Albert Museum, where a Roman soldier in richly decorated armour and helmet is fighting on the back of a horse whose heavy form and thin legs recall the type of horse in Giovanni da Bologna's statues.

Finally should be mentioned a somewhat larger terra-cotta reproduction of this same motive,—the rearing horse with the fighting rider,—in the possession of Mr. Herbert P. Horne, in Florence, ascribed by its owner to some contemporary of Leonardo's, possibly Giovan Francesco Rustici, in whose house Leonardo lived during his later Florentine period. The modelling of the horse is purely Leonardesque, although it does not correspond exactly to any of the above-mentioned drawings, and possibly was made from a clay model by Leonardo.

But besides the small reproductions of rearing horses there are several Italian bronzes showing pacing horses, with or without a rider, which also are supposed to reproduce some sketches or ideas by Leonardo. Thus one little statuette of this kind in the J. Pierpont Morgan Collection is called in the catalogue a copy after Leonardo's Trivulzio statue. Although this statement is not sustained by any existing drawing, the horse has some likeness to the *Regisole* statue as shown in Leonardo's studies. It may be a derivative of the same original. The rider is a Roman emperor or a general, and when a

Italian, Middle of XVI Century
Bronze Statuette
Victoria and Albert Museum, London

North Italian Artist, Beginning of
XVI Century Bronze Statuette
Pierpont Morgan Coll.

Paduan Artist, End of XV Century
Bronze Statuette
Gustave Dreyfus Coll., Paris

Paduan Artist, End of XV Century
Bronze Statuette
Victoria and Albert Museum, London

replica of the same bronze appeared at the Goldschmidt sale in Paris, 1898, it had as a pendant a similar horse carrying a soldier in full armour [now in the Heugel Collection in Paris]. Horses of the same type are to be found in the Museum of Berlin[1] and in the Museo Archeologico at Venice; they are all characterized by the extremely high-arched neck, the hogged mane, and the ambling posture. They are evidently closer related to the Greek horses on St. Mark's, Venice, or to some similar antique bronzes (possibly the *Regisole?*) than to Leonardo's free inventions where the horse is represented in a trotting, not in an ambling movement. Leonardo had introduced this change in defiance of previous tradition; both Donatello and Verrocchio having represented their horses at a pace, moving the legs on the same side simultaneously and resting three feet on the pedestal. This mode of composition naturally yielded the most satisfactory results from the statical point of view, and, as we have already observed, had authority in the wonderful antiques on St. Mark's façade. On the other hand, it contributed to impede the liberty of movement and the onward-pulsing rhythm of lines designed for Leonardo's monument, in close conformity to the early trot of the *Regisole* horse at Pavia, but with much more individual rhythm and dash.

[1] *See* Nos. 247 and 248 in the catalogue of the Kaiser-Friedrich Museum: "Die italienischen Bronzen," said to have been executed after Leonardo's model.

There exist quite a number of small Renaissance bronzes representing soldiers or commanders on pacing horses which cannot be indicated as free copies of Leonardo's sketches but rather grouped as imitations of Donatello's and Verrocchio's equestrian statues. The imitations of *Gattamelata* are of course Paduan from the latter part of the fifteenth century; the horse is characterized by a very heavy and broad form, resting with three feet on the ground. In one of the earliest versions the rider is almost a boy,—very small in comparison to the animal,—and lifting the left hand with some weapon [represented in the Victoria and Albert Museum and in the J. Pierpont Morgan Collection]; in another somewhat later version belonging to M. Gustave Dreyfus in Paris the rider is a commander in armour, of the *Gattamelata* type, but the horse is still the same as in the above-mentioned bronzes. Another statuette in the Morgan Collection, according to the catalogue "in the style of Leone Leoni," presents a freer and weaker translation of the same motive, the horse being of very elongated shape. Verrocchio's *Colleoni*, on the other hand, seems to be the main inspiration of the equestrian statuettes by Andrea Riccio and his co-workers. They are altogether thinner, more supple, and more elegant than the Paduan bronzes; the horse appears with the hind legs in varied positions. Replicas of this bronze are to be found in the museums in London, Berlin, Paris, in the J. Pierpont Morgan Collection and Lehman Collection in New York; the best in the Salting Collection in the Victoria and Albert Museum.

Amongst those who imitated Leonardo's trotting motion should be noticed, in the first place, Albrecht Dürer in his well-known engraving *Knight, Death and the Devil.* The resemblance to Leonardo's drawings here has been pointed out in detail by Woelfflin in his book on Dürer (p. 189); we need only add that the horse's head also is directly copied from Leonardo's drawings (Ambrosiana and Windsor).

In later Italian (and also extra-Italian) equestrian monuments the trotting position of the legs in the horse seems to have been generally retained, although the movement is, as a rule, not so easy and vigorous as in Leonardo's designs. Thus, Giovanni da Bologna's statues of Duke Cosimo I and Duke Ferdinand I, at Florence, with their well-fed, compact steeds, ride on parade in a sort of tripping movement instead of an easy trot. The relative proportions between rider and horse are also the opposite of Leonardo's. The horse has dwindled to a mere pedestal for the parading prince. Giovanni da Bologna's *Cosimo I* does not justify the designation *Il Cavallo.* More beautiful proportions between rider and horse and a more dashing movement in the animal are to be found in Francesco Mocchi's two monuments to *Alessandro* and *Ranuncio Farnese,* erected in the market-place of Piacenza at the beginning of the seventh century. They are, indeed, somewhat bombastic compositions, with tasteless exaggerations, but in the proud bearing and movement of the animal may be discerned a *grandezza* recalling Leonardo's later design. There are few equestrian monuments with horses trotting as easily and freely as Alessandro Farnese's courser.

The rearing horse recurs on a larger scale in some remarkable equestrian statues, whose connection with Leonardo's design seems, however, to be more indirect. The most famous of these, is, no doubt, Pietro Tacca's *Philip IV* at Madrid,—a monument in which, according to the opinion of connoisseurs, the elegant attitude of the horse comes in part from the King's desire to follow the fashion of the Spanish riding-school.

Another Italian work with this motive executed by the Sicilian, Giacomo Serpotta, and erected at Trapani, is now destroyed. Finally, there should be noticed Bernini's marble *Emperor Constantine* on a

Andrea Riccio, Bronze Statuette
Pierpont Morgan Coll.

Francesco Mocchi, Statue of Aless. Farnese
Piacenza

Italian, Middle of XVI Century
Bronze Statuette
Pierpont Morgan Coll.

Giovanni da Bologna, Statue of Coscino I
Piazza della Signoria, Florence

galloping horse, at the Scala Regia in the Vatican, and Falconet's *Peter the Great,* steering his wild courser upon a rock, on the Neva Quay at St. Petersburg; but we have no reason to suppose that these artists were acquainted with Leonardo's idea as the first link in the series.

VIII

THE LAST SUPPER

Leonardo's *Last Supper,* painted on the wall of the refectory of Santa Maria delle Grazie in Milan, was begun in 1494 or 1495, and it is probable that it was substantially completed by the end of the year 1497. In a letter of the 29th of June of that year, the Duke exhorts his secretary, Marchesino Stanga, "to urge Leonardo, the Florentine, to finish the work he is engaged on in the Refectory of Santa Maria delle Grazie, so that he may be able to begin the work on the other wall in the same Refectory. . . ."

Which means that the conditions which Leonardo had subscribed to with his own hands were to be enforced, and that he was to be compelled to have the work completed within the stipulated time.

The theme had long been in the painter's mind and naturally appealed to his interest in human character; it fascinated him by its interplay of actual and ideal expression in the individual types, and by the dramatic action culminating in one overpowering emotion, the whole uniting perfectly in the function of architectonic decoration.

During his whole career Leonardo delighted in the study of physiognomy. He loved to bring together strongly marked types of widely differing natures in order to intensify by contrast the dramatic expressions of the human face. "The expression of a face must be varied according to the emotional state of the person," he writes in the "Treatise on Painting." And he adds, most significantly: "Moreover all the limbs and attitudes must correspond to the expression of the emotions in the face." We know that he lived up to that precept, for no one understood better than he the art of characterizing human figures by their gestures and attitudes, as much as by their expression of countenance. He acquired this art by unremitting, penetrating, and concentrated observation of the world around him. Wherever he went, whether at work or resting, in the country

Leonardo, Studies of Old Men—Pen-Drawing
Royal Library, Windsor

Leonardo, Dancing Angels. Possibly Studies for an Assumption of the Virgin which Leonardo, According to Amoretti, Executed over the Entrance to Sta. Maria delle Grazie, Milan

Academy, Venice

Leonardo, Studies for a Last Supper

Royal Library, Windsor

as well as in the crowded city, he constantly observed with the eye of the painter and of the psychologist the people he saw moving about him, and with a few rapid strokes jotted down in his note-book their poses, the scenes in which he saw them, their characteristic traits and movements. It is a practice he recommends to all who desire to become efficient "historical painters." He says: "When you have acquired a good knowledge of perspective, and know by heart all the different parts of the figure and their form, you ought in your walks to constantly and eagerly note the movements and expressions of people speaking together or quarreling or laughing or coming to blows, taking in, not only their actions, but those of the by-standers as well."

"With few, rapid strokes, you should record the poses of men in different emotional states, but without letting them see that you are observing them; for, if they become aware that they are being observed, they will transfer most of their attention to you, and the feeling which possessed them will recede further and further from their minds. For instance, when two men quarrel and each of them believes himself to be in the right, the different parts of their bodies—their eyebrows, arms, etc.,—follow the spirit of their words and assume a character in keeping with their angry mood. And this you would not be able to see at all, if you tried to make them simulate their anger or any other emotional state like pain, admiration, fear, laughing or crying. . . . You ought, therefore, to carry with you a little book with leaves prepared with bone-dust, so as to be able to note down, rapidly, with the silver-point, the different movements,—recording also the poses and the grouping of the bystanders. In this way you will learn to compose historical pictures. And when such a book is filled with drawings, it should be laid aside and kept for future needs. . . ."

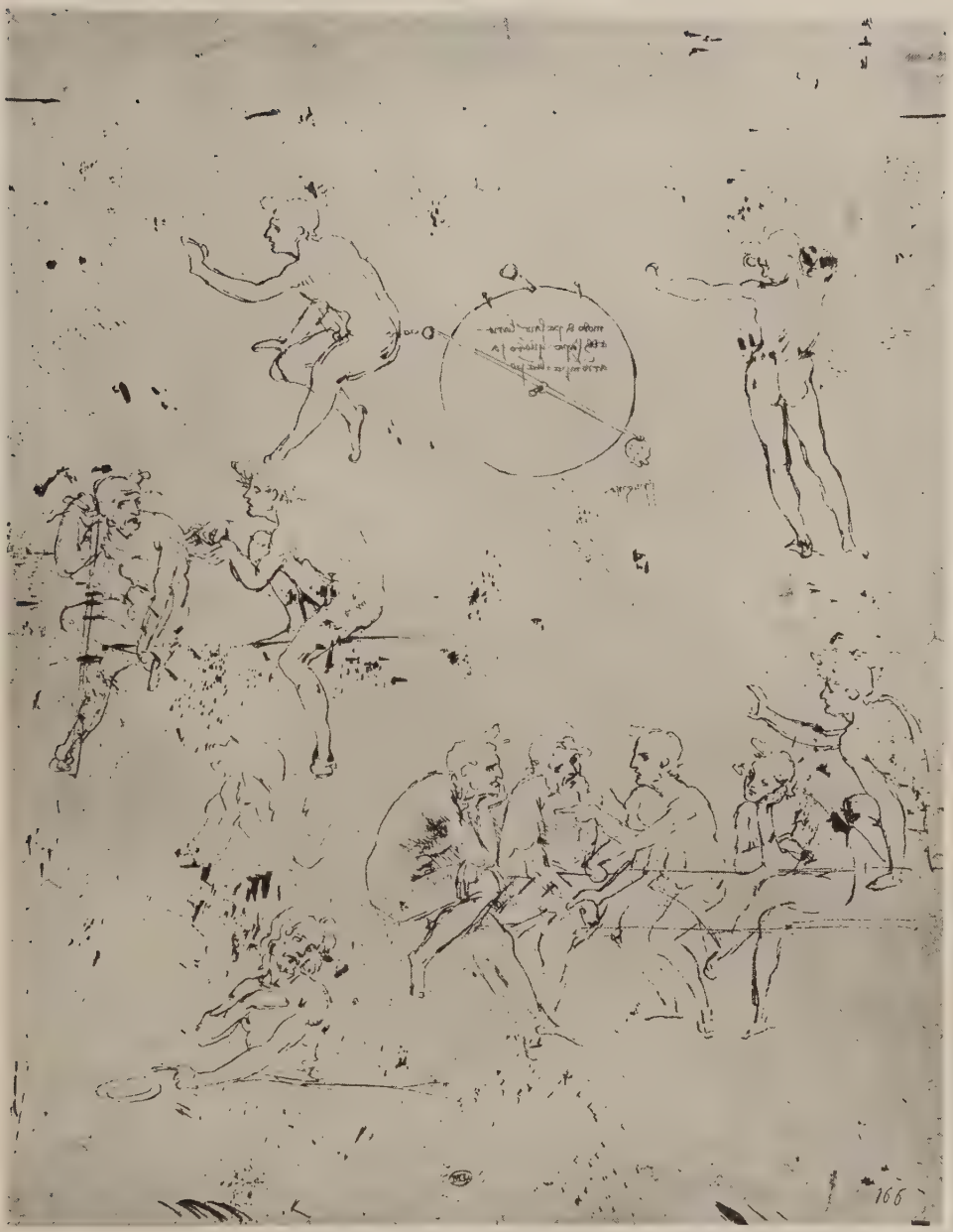
The studies for the *Last Supper* form a splendid series of illustrations of this manner of working, practised and recommended by Leonardo. Among that rich collection of drawings of figures engaged in converse or in dispute which were made by him during his first Florentine period, a group gradually separated itself from the other figures. In the background sketches for the *Adoration* there occur some motives which, in a certain measure, prepare the way for the composition of the *Last Supper*. Thus, on the sheet in the British

Museum which shows the characteristic horn-blower of the earlier picture of which we have spoken, we see two other figures conversing. And in a red-chalk drawing at Windsor, which also seems to be intended as a study for the background of the *Adoration,* there is a separate group of three men sitting on a bench, conversing.

It is, however, uncertain whether Leonardo connected these studies with the thought of a composition for the *Last Supper.* This intention does not really become evident until we come to that big Louvre drawing with various groups conversing and arguing at a table and a male figure sitting alone with a plate before him. By expression and gesture this last study is plainly characterized as a *Christ.* From the manner of drawing this Louvre sheet must also be assigned to Leonardo's first Florentine period, when he was engaged on the *Adoration.* The standing figure of an archer, seen from behind, may have been intended for the background of the Florentine composition.

The group at the table represents the characters engaged in a most animated conversation; one of those discussions, intense in word and gesture, that are still the fashion of the day in Florentine public gatherings. The old man at the end of the table having had his say, it is the turn of the younger man to reply. He does so with a conviction which seems to shake his whole being; his eyes are fastened on his opponent while his words are significantly accompanied by the resolute pointing gesture. In his eagerness to hold forth without interruption he grasps the wrist of the man sitting next to him, like a fighter parrying with one hand and attacking with the other. His opponent sits crouched, chin on hand, listening with keen attention, while two youths at the side are equally interested. Eagerness to speak, the burning desire to express his meaning, animate each of the figures. They plainly exemplify the following lines from the master's "Treatise on Painting": "By all their movements the hands and arms ought, as far as possible, to express the intentions; for those who have a lively temperament use them to accompany all the intentions of the mind. When good speakers wish to persuade their hearers into something they always let the movements of their hands and arms go along with the words. . . ."

This sheet of studies can be brought into direct connection with the subject of the *Last Supper,* by means of the Christ at the table,



Leonardo, Studies of Discussing Men

Louvre

Leonardo, Studies for a Last Supper

Royal Library, Windsor

and a man who is leaning forward with his hands shading his eyes, as if he wished to avoid seeing the awful sight of one of the disciples denouncing himself as about to betray the Master.

We have reason to believe that Leonardo's sketch-book contained many pages of a similar nature though they are now no longer extant. There is a considerable development of ideas from these preparatory studies from life to the final compositional design which was probably not executed before Leonardo had received the commission for the painting. Intention and manner have changed; instead of direct studies from life we have a big decorative composition on the dramatic text: "One of you shall betray me."

In a hasty pen-sketch at Windsor we find Leonardo's compositional idea in concentrated form, with the apostles and Christ sitting in a row at a long table, while Judas is in front of the table, his face turned partly towards the spectator. This is the traditional place of the traitor as we shall see in studying early Florentine pictures of the *Last Supper*. As in several others of his compositions, Leonardo at first kept within the bounds of tradition, and then gradually organized all the different elements into an entirely original and much finer design. The scene is now laid in a large hall or refectory, with high arches indicated in the background. The sketch is so rapidly executed and so abbreviated that we cannot make sure of any other figure than that of Judas. In a separate sketch, lower down on the paper, the artist has, however, drawn the chief characters of the drama more plainly and on a larger scale. Here we recognize Christ as He has already been represented in the drawing of the Florentine period in the Louvre, with pensive head and an arm extended towards the plate before him. On one side is St. John leaning on the lap of the Saviour, balanced on the other side by a seated apostle who shades his eyes with his hand; Judas is rising, in accordance with the account of St. Matthew: "He that dippeth his hand with me in the dish, the same shall betray me." The whole scene has already far more life and dramatic power than we find in most of the *Last Suppers* of the period, but a masterly control of the composition is still wanting.

It is difficult to determine whether this small pen-drawing is earlier or later than the larger red-chalk drawing of the Venice Academy, as the latter differs so essentially from Leonardo's other

drawings. The Venice drawing is in part hastily executed and the figures at first seem to lack much of the organic firmness and lucidity that generally distinguish Leonardo's types, so that a number of eminent critics have gone so strangely astray as to think it a later imitation. Most connoisseurs, however, seem to agree in finding in this very extraordinary drawing a curiously emotional and entirely unpremeditated attempt to fix the fleeting emotional states of the different personages in the drama. Most of them are furnished with names written in Leonardo's reversed left-handed writing, and their poses were partly utilized in the final painting, though combined there in other ways. The drawing, moreover, was made on a sheet which did not have room enough for the whole long table. The artist was, therefore, compelled to make the composition into two parts, drawing the four figures from the left side below the others. But when we unite the two parts of the composition into a connected whole, Leonardo's intentions are brought out quite clearly.[1] The composition is not devoid of rhythm, but it is in groups of two, rather than of three figures, which are divided by such intervals that any real interchange of thought between the different actors of the drama can hardly take place. The whole arrangement is still dominated by the endlessly long, monotonous, horizontal line of the table. In front of it, small as a pigmy, as in so many of the earlier Florentine *Last Suppers,* sits Judas, lifting his hand in order to dip the sop in the dish at the same time as the Christ. The Master pronounces the fatal words with an expression so mild, that it might almost seem feminine were it not for its infinite tragedy, but, in the other personages, his words create consternation and amazement, expressed in violent gestures and attitudes. St. John flings himself down on the table to smother his sobs, while Thomas stretches out his arms and twists his body as if groaning with pain; between the two, James the Elder rises up, as if instantly to protest against the possible occurrence of any such thing as the Master had been foretelling. The other apostles exchange thoughts with one another, or, like the fine old men, Andrew and Bartholomew, on the left, are lost in profound meditation.

"A good painter has to represent two things, namely, man and

[1] *Cf.* Beltrami, "La Ricomposizione di uno studio di Leonardo per il Cenacolo." *Bollettino della Raccolta Vinciana,* 1910.

Leonardo, Drawing in Red Chalk for a Last Supper

Academy, Venice

his emotions," writes Leonardo. "The first is easy, the second is difficult, for it must be expressed by the gestures and movements of the limbs. This can best be learnt from the deaf and dumb, for they perform these gestures better than any other kind of men." As a matter of fact the somewhat rapt-looking and most expressive figures of this drawing remind us somewhat of the deaf and dumb. The artist has, in any case, aimed at representing the "emotions" rather than the outward man.

Admitting the undeveloped grouping, the summary indication instead of real definition of bodies, there still remains a characterization of types and an intuition of action which is one of the marvels of all drawing.

Leonardo's idea of how the different members of this assemblage ought to be shown to demean themselves when one of them suddenly launches a startling piece of news has been summarized by him in a few lines written in one of the note-books preserved in the South Kensington Museum (Forster Collection). These observations are illustrated in part by the figures in the painting, although in several respects Leonardo has evidently modified them in the actual representation.

One who has been drinking sets down the glass in its place and turns towards the speaker. (This is Philip?) Another spreads out the fingers of his hand and turns with contracted eyebrows towards his companion. (As in Thaddeus or Simon?) Another displays the palms of his hands, raises his shoulders to his ears, while his mouth signifies astonishment. (As in Andrew.) Another speaks to his neighbour while the latter is turned towards him and lends a listening ear; in one hand he holds a knife, in the other the loaf half cut through by the knife. (This describes Peter and John, although the episode of the knife and bread is dispensed with.) Another, who is holding a knife in his hand, turns around and upsets a glass with his hand. (Judas is upsetting a salt-cellar.) Another lays his hands on the table and looks straight in front of him. (The standing Bartholomew.) Another is blowing on his food. (This was probably Judas, who originally, as noted in the drawing, was to have been designated by the sop which he dipped in the dish together with Christ.) Another leans forward in order to see the speaker and shades his eyes with his hand. (Peter and John are leaning forward, though not with the stated position of the hand which is to be seen in one of the drawings.) Another draws back behind this last figure and is looking at the speaker. (James the Elder.)

Of Leonardo's next studies,—those for the separate heads,—only a small number are preserved, all being now at Windsor; these complete the working out of the characterization, every face being

individualized down to an expression of the immediate mood. In these famous studies each apostle is presented as a distinct personality, with actions and emotions never repeated but brought out by contrast. A mighty surge of feeling binds them all together, a sudden and unexpected passion stirs them, each in his own particular way. The play of features is, as it were, prismatic; it breaks a central motive into twelve different facets. We see Philip, with long wavy hair framing his youthful face, full of pensive beauty; Matthew's classical type in straight profile with shining eyes and curly locks; and Bartholomew's very similar profile with a short beard and a more severe expression; further, James the Elder's sharply cut face with open mouth and flaming eyes, where the dramatic tension has been heightened almost to a pitch of frenzy,—a reason why this head has often been connected with Leonardo's battle-piece,—and, finally, the terrible head of Judas, turned in *profil perdu,* so that the sinews of the lean neck are strained and taut. When we study the painting itself, we shall have occasion to examine more closely the tragically grandiose delineation of character which Leonardo has given us in Judas Iscariot. In order to thoroughly appreciate this type of face, as well as the other types of the master's study drawings, one must realize something of the place of each figure in the drama. Unfortunately the Christ head is lacking in the Windsor series, and the very celebrated head in the Brera at Milan, which perhaps represents the master's conception, has been almost completely redrawn and cannot be entirely trusted as a criterion.

We may now turn to Vasari's description of the painting itself, which, in spite of some exaggeration, is a good introduction to the work and a fair account of the circumstances under which it was executed:

> He also painted at Milan for the Dominican Friars of Santa Maria delle Grazie a representation of the *Last Supper,* a wonderfully beautiful piece of work; and he imparted to the heads of the Apostles such majestic beauty that he must needs leave the head of Christ unfinished, for he did not deem himself able to render the divine glory which is in keeping with a portrayal of Christ. Although the work was left in this unfinished state it has always been held in the greatest veneration by the Milanese and also by strangers; for Leonardo succeeded in expressing the suspicion which he imagined had seized the apostles and their anxiety to know who was to betray their Master. Thus one sees written in the faces of all, love, fear, and anger, or rather grief, at not being able to understand Christ's meaning. This excites in us no less admiration than the face of Judas which, in contrast, exhibits stubbornness, hatred,

Leonardo, Caricature-Head
Academy, Venice

Leonardo, Study of a Man's Head
Windsor

Leonardo, Study for James the Elder
Windsor

Leonardo, Study for Philip
Windsor

and treachery. Moreover, every little part of this work is painted with incredible care, down to the very tablecloth, the texture of the fabric being so well imitated that linen itself could not look more real.

It is related that the Prior of the place, in a most importunate manner, kept pressing Leonardo to complete the painting. It seemed strange to him that the artist could sometimes stand a whole half day at a time lost in thought before his work. He would have had him go on, like the labourers digging in the garden, without ever letting his brush rest. And, not being satisfied with this, he complained to the Duke and so set upon him that the Duke was at last obliged to send for Leonardo and urge him to complete the work, which he did delicately, letting him understand that he did so in consequence of the Prior's importunities. Leonardo, who knew the acuteness of the Duke's understanding and his considerateness, began then to speak freely with the Duke, something he had never done with the Prior. He spoke much about art and explained to the Duke that men of genius often accomplish most when they work least, for then they are forming conceptions in their minds and elaborating in more perfect fashion the ideas which the hand expresses afterwards. He added that two heads still remained to be complete: that of Christ,—which he could not seek on earth; nor did he deem himself able to fashion in imagination that celestial beauty and grace which should mark the divinity incarnate; then the head of Judas which was also troubling him; for he did not believe he could conceive a type suited to express the man who, after all the benefits he had received, had so cruel a mind as to betray his master and the Creator of the world. This latter head, however, he should seek for, but if at length he could not find anything more suitable, he should not fail to make use of that of the troublesome and importunate Prior. This proposal greatly aroused the Duke's mirth and he admitted that the artist had a thousand good reasons on his side. And so the poor Prior went off in confusion to tend his garden, leaving Leonardo in peace. The latter then finished the head of Judas, which appears to be the very incarnation of treachery and inhuman cruelty. That of Christ, as I have said, remained unfinished. The nobility of this picture, both in the design and in the incomparable care with which it was executed, made the King of France desire to take it with him to his country. He left no means untried to find an architect who should brace it with cross-stays of iron and wood so that it might be transported safely, and he paid no consideration to expense, so eager was he to possess the work. But, as it was painted on the wall, his Majesty was obliged to desist from carrying out his desire and the painting remained with the Milanese.

While engaged on the *Last Supper,* Leonardo painted on the end wall of the same refectory, where there already was a stiff *Crucifixion* in the old manner, the portraits of the said Duke Lodovico and of his eldest son Massimiliano on one side and on the other those of the Duchess Beatrice and of Francesco, their second son, both of whom (Massimiliano and Francesco) became afterwards Dukes of Milan. These portraits are divinely painted.

This story of Vasari's about the prior occurs in a somewhat different version in Giovanni Battista Giraldi's *Discorsi* published at Venice in 1554. The author, who asserts that he got the anecdote from his father, relates that Leonardo used to go every morning to the Ghetto where the worst reprobates lived, in order to find a suitable type for Judas, but, failing to find any which he considered

ugly enough, he expressed his intention to use the type of the troublesome prior for this purpose.

A still more graphic description of Leonardo's work in the refectory is to be found in the introduction to Matteo Bandello's fifty-eighth tale (printed at Lucca in 1554). This Bandello, who was a relative of the prior of Santa Maria delle Grazie, was a novice in the monastery at the end of the fifteenth century; he had thus an opportunity of personally watching the artist at work.

"At Milan in the time of Duke Lodovico Sforza-Visconti," he writes, "there gathered numerous noblemen in the Dominican cloister delle Grazie, lingering quietly in the Refectory to look upon the wonderful and most famous picture of Christ and His disciples at the *Last Supper,* which the eminent painter, the Florentine Leonardo da Vinci, was then executing. Leonardo encouraged any beholder to express his thoughts freely with regard to his painting. He used often, as I myself many a time have observed, to go up there early in the morning and climb up on the scaffolding (the picture was raised somewhat from the ground); he used to go, I repeat, and from sunrise to dusk, he would not lay down his brush, but, oblivious of food and drink, he would paint without intermission. Then two, three, or four days might pass without his laying his hand to the work, though he often would stand one or two hours before his painting, merely contemplating, examining, and judging his own figures. When the whim came upon him I have also seen him at mid-day when the sun is in the sign of the Lion, set out from the Corte Vecchia, where he was at work on the clay model of his marvellous horse, and coming straight to Santa Maria delle Grazie, climb up on the scaffolding, seize the brush, give one or two touches to one of the figures and again retire. At this time the old Cardinal of Gurk (in Austria) had taken up his residence in the monastery, and it pleased him to enter the Refectory to see the *Last Supper,* while the said noblemen were assembled there. When Leonardo saw the Cardinal, he stepped down in order to pay him homage and was received by the latter graciously and with marks of esteem. The Cardinal inquired what salary he received from the Duke Lodovico. Leonardo replied that he ordinarily had a salary of 2,000 ducats, besides the gifts and presents which the Duke liberally sent him. The Cardinal made answer that this was a large sum and retired again to his rooms.

The Refectory at Sta. Maria delle Grazie, Milan

Raphael Morghen, Engraving after Leonardo's Last Supper

Leonardo, The Last Supper and the Decoration above, in the Old Refectory of Sta. Maria delle Grazie, Milan

Leonardo in his turn related to the noblemen present a little story to show that eminent painters have always been held in high esteem. I, who was present, committed the story to memory." Then follows Leonardo's story which deals with Fra Filippo's sojourn among the Turks.

We know that the Cardinal of Gurk was residing in the monastery in 1497. The episode may thus have taken place much as it is related. The most doubtful point is the statement as to Leonardo's salary, which seems to have been irregular and uncertain.

* * * *

It is evident from the artist's own drawings as well as from the statements of ancient writers that the actual painting of the *Last Supper* was prepared with extraordinary care, but executed rather rapidly and impulsively under the influence of strong inspiration. We know of no other work of Leonardo's—with the possible exception of the lost battle-piece—which in the same degree as the *Last Supper* can have been worthy of the exercise of his whole spiritual energy and adapted to stimulate him in striving for absolute perfection. In fact it was this supreme monumental work which won for Leonardo the appreciation of all his contemporaries and the leading place among artists. Time has dealt unkindly with the picture, and it takes a trained eye to discover its beauty in detail. There is enough, however, to realize its actual execution.

If we enter the large hall of Santa Maria delle Grazie at Milan, formerly the monks' refectory, we are confronted with a sight which scarcely seems to conform to the ideas which the majority of visitors have associated with one of the most famous masterpieces in the world's art. The entrance is at one end of the room. This end wall is adorned with a big clumsy fresco of *Calvary,* by Giovanni Montorfano, which is only rendered interesting by the portraits of Duke Lodovico, his wife, and two sons added by Leonardo. At the other end of the empty room is descried,—vague and faint in outline, like a shadow, or as if seen through the dusk,—the ruin of Leonardo's painting. Gloomy and depressing is the tragic history of its fate. The real cause of its present sad condition lies with the artist himself who painted it in a manner of technique and upon a ground the preparation of which was entirely unfit for the purpose.

Instead of the ordinary fresco technique on a wet ground, he painted in tempera on a ground which was prepared with pitch, mastic plaster and other ingredients spread with a hot iron on the wall. He did this in order to protect the painting from nitre and other injurious elements. The ground so prepared was covered with an under-painting in light colours and oil varnish which was intended to facilitate the modelling. In the course of time, however, this painted under-ground began to dry, and consequently to contract and flake off from the wall. Cracks appeared in the preparation of mastic and plaster, and through them the damp of the masonry came out more and more until the whole picture was gradually covered with a coating of damp and dust. The deterioration had proceeded so far that at the beginning of the seventeenth century a lover of art, the Cardinal Federigo Borromeo, employed the painter Andrea Bianchi (also called Vespino) to make a copy of the upper part of the figures, so that he might have a record of the picture. This copy is now in the Ambrosiana Gallery of Milan. In the year 1652 the central portion of the lower part of the work was further injured by a door cut in the wall. In the year 1726 the picture was subjected to a thorough restoration in the rather ruthless manner of the time, and in 1770 it was partially painted over afresh. About 1800,—the monastery having been vacated by the monks,—the refectory was used to store hay, and the painting was naturally subjected to much wanton injury. When Napoleon's step-son, Eugène Beauharnais, became Viceroy of Italy, measures were adopted for its preservation. His interest in the work was such that he had a copy of it executed in mosaic, in order that the composition might be preserved in a lasting material and for all time. The cartoon for this mosaic, which is now in the Minorite Church at Vienna, was made by the painter, Giuseppe Bossi, who at the same time wrote a long treatise on the work which served as the basis for Goethe's celebrated explanation of Leonardo's composition.

In the early years of the nineteenth century, proposals were made for the transfer of the painting to canvas, but were never carried into effect. Instead of this the work was freed from some of the early repaints and again fixed to the wall but by no means in a permanent manner. The colour continued to come off in the shape of a fine powder, and the painting again became obscured with a

thicker and thicker coating of dust and moisture. Then, at length, came forward a man who showed himself able thoroughly to clean it, and, at any rate, to secure it from destruction for a time. After exhaustive trials and experiments, Professor Luigi Cavenaghi, the present director of the Vatican Museum, began his work of restoration in June, 1908, and had it finished within barely three months. The painting was thoroughly cleansed from dirt, and partially from old glue and retouches. It was not possible, however, to remove all the old repaints, as empty patches of wall would then have been revealed. The pigment which was peeling off was fixed with a suitable binding medium. Moreover,—and this is of extreme importance to us,—through Cavenaghi's technical investigation, it was ascertained that more of Leonardo's original work has survived than was once thought to be the case. According to Professor Cavenaghi, the only parts that were entirely painted over were Christ's left hand and the table about it; otherwise the earlier restorations were restricted to the filling in of the missing parts in the garments and tablecloth. The faces and hands are practically untouched, except those of Christ and of Philip. The best preserved parts are the right hands of Peter and Thomas and Simon's whole figure. The objects on the table, the ceiling and the landscape are—according to Cavenaghi—fairly free from restorations.[1]

The results of this painstaking examination are of the greatest value to art history. We have every assurance that in studying the work itself we are on firmer ground than we had hitherto ventured to suppose. What survives is, in the main, Leonardo's own work, even though bereft of all its original brilliancy. In so far as we can make out the different faces, hands, garments, and other objects, we obtain a true notion of the artist's intention. Now that the paint has been entirely freed from the dirt which hid it, and been securely affixed to the wall, the whole picture has assumed a smoother, clearer, and more uniform appearance, and several parts of it which used to be practically indecipherable have now distinctly emerged. All statements earlier than 1908 as to the technical side of the painting, its preservation, etc., should therefore be received with the greatest caution.

[1] *See* Cavenaghi's official report on the work of restoration published in *Rassegna d'Arte*, 1908.

Cavenaghi's restoration extended also to the three lunettes above the *Last Supper*. They now display quite clearly the Sforza arms, surrounded by magnificent garlands of leaves and fruit, tied with pale golden ribbons. At the side are monograms of the Duke and Duchess and their titles. The pointed vaults rising above them are painted in the dark blue of the night sky and studded with golden stars. The spandrels above the windows of the two longer sides of the hall—for which a similar decoration had probably been planned—are not decorated; all we now see on these walls being a broad geometrical border under the windows, terminated by festoons or garlands,—a decoration which is presumably of later date. The light falls through four large windows on the left wall; the small lunette windows of the opposite wall, looking out upon a cloister court, play a far less important part in lighting up the lower part of the hall and the painting.

In formal composition the *Last Supper* shows an interior effect intended to harmonize with the actual room it decorates, the picture being chiefly lighted from the windows on the south wall, the groups of figures to the right of the Christ having thus the chief illumination. This natural illumination is carried out in the pictorial scheme by the evening light from the painted bit of landscape vista which comes in through three windows in the background and plays about the isolated Christ figure in a quiet, halo-like radiance, running also in a lowered tone along the wall and over the various objects and the cloth on the table. We have thus a dimmer setting for the scene than the natural light of the hall and as in the picture the line of figures is raised considerably above the level of the floor, there can be, of course, no naturalistic illusion. The good monks could, as it were, feel the spiritual presence of Christ and the apostles, yet as entirely aloof in an overworld of vision.

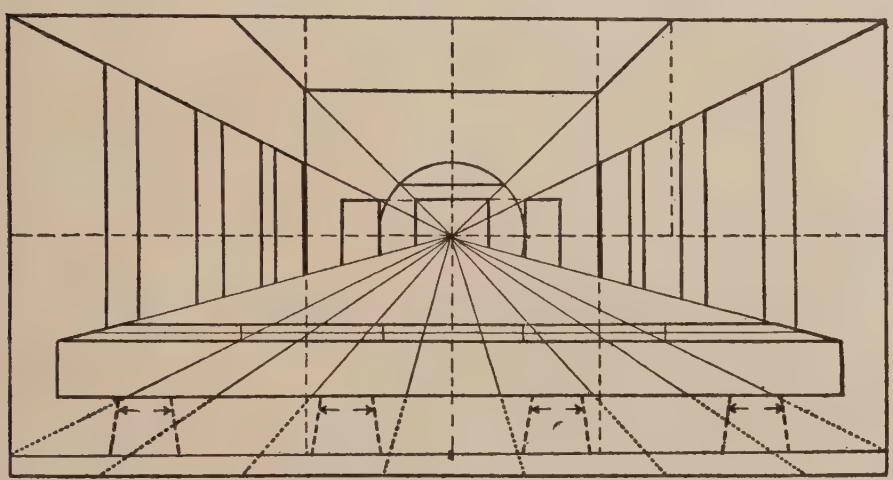
The severe but simple perspective of the interior helps the monumental effect; and the walls, now much darker than originally, give a sense of breadth and roominess as they frame in the wavelike contours and masses of the figure-groups. They are hung with eight deep red brocaded tapestries, once patterned with a leaf motive, which is now faded almost completely away. The tablecloth, showing a quiet creamy color and worked with a pattern at its borders, helps much to bring the picture into harmony. We have thus tense

LEONARD
REFECTORY OF STA.

ST SUPPER

DELLE GRAZIE, MILAN

dramatic action and expression in peaceful surroundings and an architectural effect which is of the greatest value as a decorative basis. It is clear that the artist was at great pains to think out the right adjustment of the constructional frame which binds together the whole composition. By accentuating certain main lines and units of measure he has produced a rhythmic clearness and harmony which are the first things to fascinate the beholder. They have something of the same power as the rhythm and the time in an orchestral composition felt before the listener has distinguished the different strains. It will repay the student to consider details of the perspec-



Scheme of the Perspective Construction in Leonardo's Last Supper

tive scheme, which has been minutely studied by some critics. Harmonious composition in space is in painting as well as in architecture a fundamental basis of the achievement of the great Renaissance artists. It greatly enhances the plastic effect of the figures and the reality of the action.

We may observe that all the lines of the composition converge at the right eye of Christ, which is the ideal centre of the drama. By the vertical central axis running through this point the picture is divided exactly into two halves, both of which are symmetrically divisioned off. Each figure-group occupies exactly a fifth of the length of the table; the central fifth being marked by the distance

between Christ's hands—and likewise by the distance between the two lateral windows of the background wall. If we wish to study the formal scheme more closely, we shall find that the principle of division into halves as well as that into three can be worked out in several different directions, as is made out by such exact investigations as those of Hoerth.[1] But in spite of their fundamental importance for the total impression, the mathematical calculations have not been expressed with such rigid regularity and fine-spun precision as to reduce the æsthetic impression to the level of a formula. On the contrary, the dramatic life and varied movements of the figures predominate, so that those who see the work for the first time hardly ever give a thought to its masterly construction in pure form.

The four clearly accentuated groups of figures are linked one to another by expressive gestures, and at the same time they are so disposed as to match one another, couple for couple, on either side of the dominating single figure in the centre. The lines press on, in a gradually ascending and rhythmic swell, from side to centre, but, just before they reach the point where they are focussed and united, the movement is stemmed, and these waves of movement are flung back by the mysterious force emanating from the perfectly serene figure of the Master. He makes no apparent effort to quell the vehement storm of emotion. His arms are spread abroad as if ready to receive, his hands lie tranquilly on the table. The outward symmetry in the bearing of the figure and the movement of the arms seem to symbolize the perfect inward poise. Once more it is the equilateral triangle that is the vehicle of expression for the highest perfection and harmony. Moreover, the clear air which bathes the landscape background serves to set off and to isolate the figure of the Christ and to enwrap Him in serene tranquillity.

All the more striking is the way in which the apostles are crowded together. They are thrust here and there, sometimes one behind the other. Were they to settle down in their places there would scarcely be room for all of them. But the arrangement is nicely calculated to break up the monotonous horizontal line of the table, while it also serves to accentuate more emphatically the dis-

[1] *Cf.* Hoerth, "Das Abendmal des Leonardo da Vinci, ein Beitrag zur Frage seiner künstlerischen Rekonstruktion." The above constructional scheme is based on Hoerth's.

order and confusion of the dramatic moment. The two groups nearest the Christ are gathered into perfect knots of movement, while the outer wings form rather restful terminations to the composition.

If we should try to identify the different apostles, it should first be understood that Leonardo himself never assigned any definite appellations to his personages, and that the names which he wrote over the apostles in the red-chalk drawing at Venice can only be partially applied here, because several of the figures have been changed, as we may see in comparing the reproductions. Only three of the figures, Peter, John, and Judas, exhibit essentially traditional types; the others are free interpretations of living models characterized down to the minutest detail as definite personalities. On the left side of the Christ sits John with clasped hands, Judas is leaning over the table, Peter reaches over towards the group comprising John, Andrew (Peter's brother), James the Younger (the brother of Christ), and Bartholomew; on the other side we see James the Elder with his arms spread out, Thomas pointing upwards, Philip putting his hands to his breast, Matthew making a violent movement towards the centre, and turning inquiringly to the white-bearded Thaddeus and the bald-headed Simon, who answer him with expressive gestures.

Now that we have discussed the genesis of Leonardo's great work and have gained some idea of its formal beauty we are prepared to study the motive in itself and in its psychological expression.

What is the real idea of the picture, or rather what is the Biblical text Leonardo had in mind?

Goethe has given the classical answer to this question in the essay which he wrote with reference to Bossi's publication on Leonardo's *Last Supper:*

> The means by which the artist perturbs the quiet, sacred evening meal, are the Master's words: "One of you shall betray me." They have been uttered, the whole company is troubled, but He lowers His eyes, lets His head drop down, and His whole attitude, the gesture of arms and hands, all repeat with divine sublimity the ominous words which the very silence seems to testify to: Yea, so it is, and not otherwise; one of you shall betray me.[1]

[1] *Cf.* Goethe's "Schriften und Aufsätze zur Kunst": "Joseph Bossi über Leonardo da Vinci's Abendmahl," and Hoerth, *op. cit.*, Chap. II, "Alte oder neue Deutung," where the author combats the interpretation of the motive enunciated by Strzygowski in the *Goethe Jahrbuch*, 1896.

Goethe's words give the very essence of the subject. But in order to get the full bearing of the event, we must also note important points told by St. Matthew and St. Mark. After Jesus has proclaimed, "Verily I say unto you, that one of you shall betray me," the text runs as follows: "And they were exceeding sorrowful, and began every one of them to say unto Him, Lord, is it I? And He answered and said: He that dippeth his hand with me in the dish, the same shall betray me."

The successive points of the Gospel narrative are represented in the painting synchronously, by the actions of the different apostles. When they hear Christ's denunciation of the impending treachery, some show amazement and consternation. Peter bends forward, putting his left hand on John's shoulder and whispers eagerly as if to ask him to demand an explanation from the Master; the other hand, which clasps a large knife, comes up involuntarily to his side, and seems about to hit Judas in the back. This effect, whether the artist intended it or not, expresses something menacing and symbolical. The apostles on the other side of the Saviour are even more violently perturbed. Thomas, the unbeliever, leans forward, lifting his hand with raised forefinger, as if to emphasize his question: "*One,* thou didst say, is a traitor? Then who can it be?" James the Elder throws himself back, his arms extended as if at a sudden lightning stroke; consternation and amazement are carried in this figure almost to the point of distraction—he cannot believe such a thing possible! But Philip, a gentle youth with soft locks about his temples, holding both hands to his breast, seems to protest: "It is not I"—and according to Goethe, he adds: "Thou knowest it, Thou knowest my heart! It is not I."

John, the most beloved disciple, is the only one who makes no protesting gesture,—he knows that no suspicion could fall upon him; he sits quietly, crushed in heart, with his arms crossed in perfect composure listening to the impetuous Peter.

At the side of this mild, fair-headed John, is seen, in sharpest possible contrast, the swarthy, passionate Judas. The movement of his left hand indicates that Christ is already pronouncing the decisive words: "He that dippeth his hand with me in the dish . . ." for both Christ and his betrayer are about to take bread, their hands are open simultaneously and uniformly to grasp it. In an instant they will each

seize their sop and dip it in the dish which stands between them on the table. But just as Judas makes this movement towards Christ he throws back the upper part of his body while with his other hand, in which he holds the bag of money, he upsets a salt-cellar. He would have preferred to withdraw before the secret was revealed but is compelled, as if by some hypnotic force, to betray his hidden purpose.

Andrew, the tall, white-bearded old man on the other side of Peter, lifts his hands with a gesture which expresses both amazement and indignant asseveration: "It is not I!" But the gesture is arrested by a word from James the Younger, who soothingly suggests that he should await the Master's explanation before yielding to further outbursts of feeling. It appears that the younger James, the brother of Christ, had a surer intuition of how matters stood than the other apostles, and was therefore able to calm them, especially the two hot-headed brothers, Andrew and Peter. We may also observe that by the laying of his hand on Peter's shoulder, he forms a link between the two groups.

At an end of the table Bartholomew stands up hastily. His legs still crossed, he grasps the edge of the table as he rises, and, leaning forward, fastens his eyes on Christ in an agony of suspense. He has his own suspicions, but he does not venture to give them expression before he has had them confirmed by the Master.

In the corresponding group at the other end, there seems to be something like a greater plainness of speech. Matthew, the youngest of the group of three, starts up and turning to his companions, points with a vehement gesture toward Judas: "There he sits, the traitor!" And the white-bearded Thaddeus makes a more cautious gesture with his thumb, as if asserting: "Well, that is what I had always suspected."[1] Simon, to whom he appeals, holds both his palms outward as if in doubt: "How am I to know that?" He is neither an enthusiast, nor a philosopher, nor a fighter, but the shrewd, practical merchant.

The different rôles enacted by the figures, their pictured speech and action are, no doubt, entirely expressed by the play of features and the language of gesture, but these in their turn are the spon-

[1] These gestures are generally taken to be directed towards Christ, although that does not explain their vehement character; it seems to me that they can only be directed towards Judas.

taneous expressions of individualities all intensely alive. Each characterization has been worked out in every detail,—hands, hair, beard, costumes, and so on; but nothing—not even the Christ figure—exists for itself alone. The ensemble can be likened to a symphonic orchestral composition for thirteen different instrumental parts, forming groups and melting together in accordance with precise mathematical calculations, but none the less with a spontaneous freedom of vision which calls forth the most enchanting harmonies. The *Leitmotif* is the solemn organ melody which quietly and deeply penetrates through the seething sea of tones. The great work is clearly the creation of a man to whom there was only one art and for whom architecture, abstract design, and music—nay, even mathematics or anatomy—were as natural mediums of expression as was painting.

At all periods the face of the Christ has been the object of particular admiration. It has been considered as the culminating example of Leonardo's capacity as an artist and as a poet. His contemporaries thought that in attempting it he had aimed beyond the capacities of artistic expression. Lomazzo relates that when Leonardo had painted all the apostles and had exhausted upon them all imaginable beauty and dignity, he went to the aged painter, Bernardo Zenale, to solicit his advice. Zenale is said to have replied: "The mistake you have committed, Leonardo, is so great that only God can repair it. It is not in your power, or in that of anyone else, to represent a higher measure of beauty and divinity than you have already given in the two Jameses. Therefore you ought to let well enough alone, and leave the Christ uncompleted!"[1]

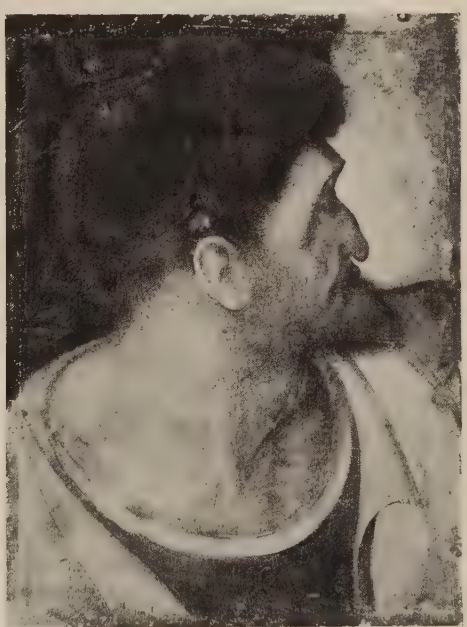
Though the anecdote may be fictitious, it seems to me to contain some measure of truth. It is not impossible that this head of Christ was regarded by Leonardo's contemporaries as not entirely finished because it was at variance with tradition in having no beard. The point cannot be decided with certainty from the painting, since the face of Christ is badly worn away and traces of a beard which one might fancy to exist may be due to some of the old restorations. On the other hand, if we turn to the drawings in the Brera Gallery and the Strassburg Museum which, to all appearance, give us an essentially correct idea of the original type of Christ in the painting, we find Christ without a beard. Moreover, the popular opinion as

[1] *Cf.* Giov. Paolo Lomazzo, "Trattato dell'arte della Pittura," p. 50.

Head of Christ, Possibly by Leonardo
Brera Gallery, Milan

Head of Christ, after Leonardo
Strassburg

Leonardo, Study for the Head of Judas
Windsor



The Head of Judas, after Leonardo
Strassburg

to Leonardo's type of Christ has been confused by the numerous later copies of the *Last Supper* in which Christ is invariably represented with a beard more or less long and a gradually narrowing and effeminate face. The climax in this development seems to be marked by Raphael Morghen's popular engraving.

The drawing in the Brera Collection has been, as we have remarked, so badly worked over at a late date that it is difficult,—nay, well-nigh impossible,—to trace with certainty the hand of the original master. As far as we can judge, however, there is hidden beneath this sentimentalized head an earlier work, a study, which, whether it was executed by Leonardo himself or by some pupil who stood close to him, in any case proceeds from his studio. It appears also as if that study was done before the execution of the painting, for the face is not so freely treated, nor so monumental as in the fresco,—it is more like a study from nature which a later hand has recast in a pietistic, prettified version. If this head of Christ were a comparatively modern work, it would certainly be adorned with a beard.

On the other hand, there is absolutely no doubt as to the date of the large drawing of the head of Christ which, together with five heads of apostles, all executed in a technique which combines water colour and chalks, now belongs to the Strassburg Museum. A number of enthusiastic admirers of these monumental drawings would fain ascribe them to Leonardo himself; but in our opinion Dehio is right in attributing them to Boltraffio.[1] That highly gifted pupil must have drawn these heads from the master's cartoon, for they exhibit a number of divergences from the finished painting, and therefore must, I think, belong to an earlier stage of the work than the fresco. The head of Christ has quite another and infinitely more monumental character than the drawing in the Brera. It is shorter and broader and, particularly in the lower part, much more powerful than in the Brera drawing. The inclination to the side is less marked, the eyelids are less drooping, the nose is straighter and not so long. All details are somewhat simplified and the undulating play of lines has given place to more strongly accentuated vertical and horizontal contours. There is no trace here of the affecting sorrowful tearfulness

1 *Cf.* Nos. 251-256 in the catalogue of the Strassburg Museum, drawn up by G. Dehio, and the same author's essay in the *Jahrbuch der kgl. preuss. Ksmlgn.*, 1896. Hoerth considers several of these drawings to be works by Leonardo's own hand.

which is more or less brought out in the copies and engravings from Leonardo's Christ, and in the Brera drawing. The head of the Saviour in the fresco was probably one of the parts which first faded or crumbled away and were consequently most freely refashioned by copying painters.

While we need not take Vasari's and Giraldi's anecdote about the importunate prior seriously,—it seems the merest gossip, though "ben trovato,"—there can be no question that in the Judas Leonardo follows an actual model, and that very closely.

The type of Judas is the perfect antithesis to that of Christ. The tension between these two characters is the very nerve of the dramatic scene. Leonardo's conceptions of the two types have become classic, and they have been often and freely imitated. Whereas Christ's mien is calm and open, with the serene face turned in full towards the spectator and the forehead showing in all its imposing breadth, Judas is the image of impatience in action and expression. His profile is long and sharp, his black hair and beard are stiff as bristles; his every feature betrays a restlessness and excitement bordering upon distress.

The psychology of the type is developed between the studies when we compare the original Windsor *profil perdu* with the Strassburg copy. The former shows us an almost repulsive physical deformity and a sharp, almost bald, old miser looking up with a scowl towards his master; with low forehead, long hook nose, heavy chin, tight mouth,—as if to hold its secret,—and an enormous, bulging neck. Yet this is no caricature; it is a living man, and with a little change of the features we feel that other and even noble traits might become manifest. With profound insight Leonardo reveals the struggle of good with evil, and the image is worlds away from the ordinary melodramatic *Iscariot* of art.

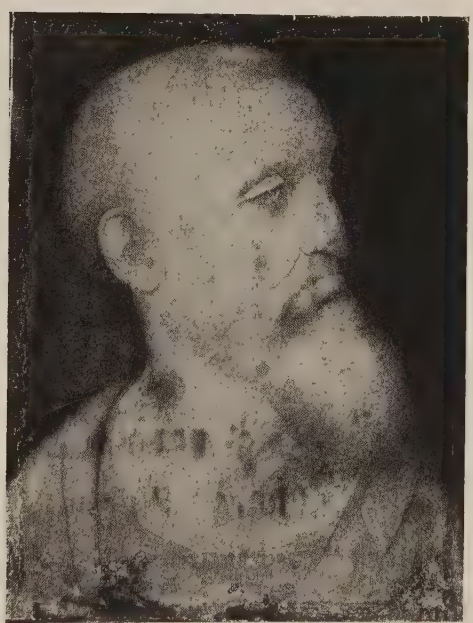
The Strassburg drawing rejuvenates the type and changes the permanent meanness of the miser into a momentary impulse of demonic passion, as if the artist had in mind the words of St. John's Gospel: "Then Satan entered into him." But in every detail we here feel that an external and formal contrast between the Christ and the Judas has caused the change, and the result is, perhaps, less tragic because less reticent.

The extraordinary impression we receive from the Judas is not

The Head of Peter, after Leonardo

The Head of John, after Leonardo

The Head of James the Minor, after Leonardo



The Head of Andrew, after Leonardo

All Four Drawings in the Museum in Strassburg

solely due to the characterization, for the position of the figure is also significant. Before Leonardo's time, it was customary to isolate the traitor by himself in front of the table, and thus not only to destroy the equipoise of the composition, but to weaken its dramatic effect. Leonardo was the first to break with this established convention; he shows us Judas Iscariot as one of the twelve by all good right and with definite personal relation to several of them as is shown by their attitudes,—and yet as none the less the instrument of Evil. He struggles with himself, he holds his hand from the bread when he hears the Master's prophecy, and sees the pain and consternation of his fellow-disciples,—but yet it must be! How much more tragic is Leonardo's conception than the mere Shylock of the popular tradition!

The drawings of Peter, Andrew, John, and James the Younger at Strassburg help to give clearness, and, on the whole, to confirm the impressions we have received from the painting.

Much better known to the general public than the drawings of the Strassburg Museum are those showing the heads of the apostles in black chalk on a large scale in the Ducal Palace at Weimar. Yet they bear less directly upon the original painting and convey no fresh information. Their great fame is due to the long-accepted notion that they were studies by the master himself, whereas they are, in fact, merely rather late and mediocre copies, the fragments of a cartoon, perhaps, indeed, derivative from the Strassburg series.[1] Our chief interest in them is concerned with the complicated question of the copies made from Leonardo's masterpiece. There are more than a dozen old copies by his pupils or by contemporary painters, and in the course of the following centuries many more were added. It would be a great mistake to suppose that all these painted and engraved reproductions, widely differing in materials and technique, were executed from the original. They were usually made from drawings after the original, in which the types and poses were followed after a fashion; but the landscape, the interior and so on, and also the colours, were treated with the greatest freedom and often modified. While no one of the innumerable copies gives an entirely reliable idea of the original, they may, together, enlighten us as to

[1] They were bought in 1850 from the sale of the collection of King William of Holland for the respectable sum, at the time, of 17,200 francs, as undisputed Leonardos.

the original appearance of the destroyed parts. We can mention only a few examples.[1]

In the refectory of Santa Maria delle Grazie, together with the original, there are now five copies, the earliest of which is a fresco executed in 1506 on one of the longer walls by the Milanese painter, Antonio del Gessate. Its artistic value is very slight. A far better copy, a fresco transferred to canvas, which came a few years ago from the Brera Gallery, was painted in the cloister of Castellazzo. While it shows that the artist took great liberties, particularly in the matter of colour, action and expression are accurately rendered,—a fact of some importance, as this copy was the basis of Rafael Morghen's engraving, the most popular reproduction of Leonardo's composition. The fresco has been attributed to Andrea Solario, one of Leonardo's later Milanese followers.

A somewhat later copy, a little oil painting by Cesare Magni, shows a peculiar roundness of the types. The indifferent artist was quite unable to imitate the broad flowing style of the original and has not troubled himself with any precise proportions. Various modifications are clearly seen and the figures have been transformed into puppets with exaggerated incoherent movements. Another little copy in oils is by an unknown painter, and the last, a large fresco, was executed by Giov. Paolo Lomazzo about 1561. This is faithful, but gives only the upper half of the painting, including the top of the table. The artist has given us in his "Trattato dell'arte della Pittura" some very valuable information as to the condition of Leonardo's original at the time.

The Louvre possesses a copy of considerable dimensions, probably by Leonardo's commonplace pupil, Marco d'Oggione. It reproduces the original with many variations, particularly in the architecture, but with the greatest accuracy as to the accessories. It gives us the most exact information about the objects on the table,—the plates, glasses, loaves, and the positions of the hands and feet,—and thus has considerable value. The dark colours, however, are quite unlike those of the original.[2]

A copy which latterly has aroused much interest and has been variously commented upon, is that at Ponte Capriasca near Lugano.

[1] There is an abundant literature on the subject.

[2] A similar copy (but smaller) is in the Hermitage at St. Petersburg.

Andrea Solario, Last Supper
Sta. Maria delle Grazie, Milan

Marco d'Oggiono, Last Supper
Louvre

Marc Antonio Raimondi, Last Supper. Engraving Possibly after Drawing by Raphael

Rembrandt, Last Supper

Drawing in the Collection of the King of Saxony

The figures, particularly the Christ, are faithfully rendered, whereas the landscape and the architecture are changed. Finally we should remind the reader of the faithful reproduction in full size by Vespino done in 1612-1616, commissioned by Cardinal Borromeo, and now in the Ambrosiana Collection.

But no copy is for a moment to be compared with Rembrandt's free and spontaneous version made from an engraving, in a drawing belonging to the collection of the King of Saxony. It adds a canopy over the Christ and lights the composition from within with the radiance of the Saviour's presence—as in many others of Rembrandt's Biblical pictures. [Compare, for instance, his *Supper at Emmaus.*]

Rubens's copy is known from Soutman's engraving; here we find Leonardo translated into the baroque, but the affinity between these two masters may be best appreciated in another connection,—in that of battle-pictures. An influence of this kind, between such mighty spirits as Leonardo, Rembrandt, and Rubens, can never be estimated in the literal borrowing of form, but it links modern art to its classic past in the most intimate way.

The best that can be said for the engravings from the *Last Supper,* of which we have several types, is that they succeed in the interpretation of the formal beauty of the work in certain phases, while quite failing to translate its real life. In the earliest, a series by an unknown Italian of the first part of the cinquecento, of which, according to Passavant, five various sheets are known, we feel the rhythm of the composition well in spite of some want of suppleness in the detail. Marc Antonio's rendition is a free paraphrase, based, it would seem, upon a drawing by Raphael, and it preserves the pulse and flow of the figures along the horizontal which no copies entirely lose. These earlier engravings please us better for their freedom than if they had been slavish imitations.

The line engravers of a later time have aimed at a more scrupulous accuracy, only to lose touch with the spirit of the original. Even Rafael Morghen's elaborate engraving, of the end of the eighteenth century, which to most students of art *is* Leonardo's picture, leaves much to be desired.

Morghen had studied Raphael far more than Leonardo, in forming his style, and he did not engrave from the fresco at Milan, but

at Florence, from a drawing which a Milanese painter had prepared for him from Andrea Solario's Castellazzo copy. Under these circumstances no one will be surprised to find that his engraving exhibits a number of departures from the original; yet he retains quite admirably the general effect of the composition and the uniform fresco style. The separate figures, however, are Raphaelesque—or pseudo-Raphaelesque, rather,—they are not at all Leonardesque. His conception of the picture is permeated by an air of sentimental mildness, quite alien to the manly force and monumental breadth which stamp Leonardo's work.

* * * *

A word remains to be said about the larger historic aspects of the *Last Supper* in respect to its iconography. It is a milestone in Western European art, which marks a complete change in the treatment of a subject, going back to mediæval art and even, in its origin, in the motive of the "fractio panis,"—to the simple naturalism and symbolism of the Roman catacombs. We are, however, mainly concerned with the radical difference of conception shown by Leonardo's design from that prevailing in earlier pictures, and with the confrontation of a few subsequent types. We must distinguish a Western-Europe tendency from that of the Byzantine or Eastern-Roman Middle Ages. It is only the former that we can discuss.

A number of formal and iconographic differences in the pictorial representation of the *Last Supper* are due to the fact that the painters followed different Gospels. As we know, Mark and Matthew make Jesus reveal the traitor by dipping the sop in the dish at the same time but mention nothing as to the behaviour of Peter and John at the meal, which is described in some detail in St. John's Gospel. The latter also contains Christ's admonition to Judas: "That thou doest, do quickly," and the addition: "But no man at the table knew for what intent He spake this unto him."

St. John's quieter, more descriptive, and less dramatic representation has in general exercised a predominating influence on Western art, while in the East the painters followed the other evangelists more closely. Thus we find that the majority of Italian pictures of the *Last Supper* from the fourteenth and fifteenth centuries represent a quiet meal; the apostles seated on either side of Christ,

Taddeo Gaddi, Last Supper

Academy, Florence

Taddeo Gaddi, Last Supper

Old Refectory of Sta. Croce, Florence

Andrea del Castagno, Last Supper

S. Apollonia, Florence

tranquil and wondering, with St. John leaning on the Master's bosom. Most of these representations, when not removed to museums, are found decorating the walls of the refectories of former monasteries, and they doubtless fulfilled a special mission as ideal pictures of a sacred meal—the ritual *agape*—and were reminders to the monks to partake of their daily bread with the thought of Jesus' Last Supper with His disciples.

One of the most typical examples from the fourteenth century is Taddeo Gaddi's large fresco in the former refectory of the cloister of Santa Croce at Florence. It contains no detailed characterization of the figures or of the situation, and the artist hardly seems to have had any particular text in mind. Although he follows St. John in the general arrangement, he nevertheless makes Judas dip the sop in the dish at the same time with Jesus, an action not mentioned by St. John but included in the accounts of the other two evangelists. Thus in this picture, matter from different Gospels has been blended together, probably in order to make the representation more vivid; and the same tendency is often met with afterwards in Florentine *Last Suppers,* with very questionable benefit to the dramatic effect. Judas in Gaddi's fresco is a hideous little wretch, smaller than any of the other apostles in spite of his sitting in the foreground, and this characterization is traditional in trecento art.

In smaller pictures the motive is often freely treated. Thus Taddeo Gaddi himself composed a diverting little illustration to the account in St. John in which Judas makes a rather shamefaced exit from the scene. Taddeo here cleverly evades difficulties in endeavouring to get all the thirteen figures at the table inside a very narrow quatrefoil.

Fra Angelico in one of his frescoes in San Marco represents Christ walking around, dealing out bread and wine to the apostles, being probably led to this interpretation by dogmatic considerations. The same form of representation is adopted by Luca Signorelli and Justus van Ghent.

But these unusual compositions must not detain us. Among the more monumental examples there is one which dominates the quattrocento quite easily. This is Andrea del Castagno's fresco in the former refectory of Sant' Apollonia, Florence, in which a master of somewhat narrow and literal mind proves himself one of the greatest realists

of all time. In spite of some formal restraint and an almost brutal symbolism, this follower of Masaccio has abundantly won the sympathies of critical taste by a noble sincerity and an overwhelming force in its expression. Castagno's *Last Supper* is the only one in Florentine art—perhaps in any art—which can possibly rival Leonardo's.

The form of composition which he adopts is the traditional one, the apostles being symmetrically seated on either side of Christ behind the long table, with Judas isolated in the foreground and John leaning in slumber on the bosom of Christ. But the setting and characterization are entirely new. The refectory is decorated in the fashion of a Roman banqueting hall with encrusted ornaments in different colours and marble medallions on the walls; the bench behind the table is hung with a rich brocaded fabric and terminated by Oriental sphinxes as arm supports. The apostles with their bony, saturnine figures, seem descendants of a titanic primitive race and bear no stamp of tenderness. The plastic severity of the figures is reinforced by the architectural perspective of the interior. The room and figures are drawn from the same point of sight, which was not formerly the usual practice. The artist has marked each separate personage by inscriptions under the figures; John and Peter, of course, sit on either side of Christ; we also note the long-bearded Andrew,—in Leonardo's picture transformed into Thaddeus,—and the youthful Thaddeus (the third from the right), corresponding in Leonardo's picture to Matthew, and Thomas, sitting engrossed in sceptical speculations with his eyes fixed on the ceiling. In fact, even in this early picture some of the figures make expressive gestures and are thus brought into emotional relation to their comrades. Judas has received the sop from Christ but seems to hesitate as to what he will do; the Master is speaking not to him but to the sleeping evangelist. We still feel a conventional air in the lack of coherence between the two principal figures.

Almost half a century later Domenico Ghirlandajo painted his frescos of the *Last Supper* at Florence, one of them in the Augustine monastery of Ognissanti, the other in the Dominican monastery of San Marco. The changes here introduced are of no sweeping nature. There is a little more variety and ease, but the composition is still strictly traditional. The placing at regular intervals of the apostles,

Cosimo Rosselli, Last Supper

Cappella Sistina, Vatican

Dom. Ghirlandajo, Last Supper

San Marco, Florence

with some feeble attempts at grouping in pairs, leaves an impression of a failure to break the horizontal monotony,—in other words, to organize an action under the formal limitations, while the figures and their characterization are commonplace. What redeems the work, to a degree, is the general effectiveness and pleasant, genial tone of the colour and surface texture as mere decoration, with the technique, always excellent as far as it goes in the work of this master and his well-trained assistants.

Cosimo Rosselli's artless Sistine Chapel fresco shows some purely illustrative modifications in details. The table, now in a crescent, is bare of food; the Saviour holding the loaf, and with the wine before him, represents the priest eating and drinking for the congregation. This picture is thus not an ordinary illustration of the Biblical story, but rather a kind of ecclesiastical representation of a rite. The loyal disciples, in stiff pairs and without John's affectionate posture or Peter's eager questioning, have their numbers swelled by extraneous portraits at the ends; the Judas is plagued by an imp; in the foreground are big bowls and ewers and a couple of noisy dogs and cats.

Against the background of paintings like these the simple grandeur of Leonardo's conception is brought home to us with overwhelming force. A comparison will reveal the striking fact that Leonardo's sweeping compositional innovations and his profounder psychological treatment of the subject at the same time denote simplification and clearer formal definition. It is manifest that his *Last Supper* inaugurates an entirely new epoch in style. Yet barely twelve years had elapsed since Cosimo Rosselli had executed his fresco in the Sistine Chapel.

And the style is different because the thought is different. Leonardo represents neither the idealized *agape* nor yet the ritual ceremony, but a violent human tragedy in which self-sacrificing love and passionate greed are brought into the sharpest contrast. His treatment of the subject has an air of universality, due less to any external generalization of the expressive medium than to the deepening and widening of the conception itself. The motive assumes richer and more universal content than Christian apologists and artists are wont to read into it,—it becomes the primeval ceremony which was practised long before Christianity made its appearance, in the

sacred mysteries of the ancient Egyptians and Greeks, just as in those of many other ancient peoples, as a symbolic form for one of the stages in the great initiation drama of the human soul.[1] The human element, independent of epoch or locality, is the outstanding motive, and transcends its Biblical source. In fact, according to Vasari's statement in the first edition of his "Lives," Leonardo accounted it a greater honour to be a philosopher than a Catholic believer. It is a touch of this independent, entirely undogmatic spirit that gives a universal meaning to his representation of the *Last Supper.*

We realize how much in Leonardo's representation of this theme is to be ascribed to surpassing individual gifts, and how little can be laid to the account of general tradition and historical evolution of style, when we glance at several types executed shortly afterwards. The *Cena di Foligno* in the suppressed convent on the Via Faenza, Florence,—long famous as a "Raphael"—may be selected as a typical average example from the first decade of the sixteenth century. This pictorially charming fresco, by an unknown Umbrian master, shows the same arrangement as that in the paintings of Ghirlandajo, while the figures are still more perfunctory and doll-like than in the work of the earlier painter. They sit symmetrically lined up on the stone bench, and a sidelong glance here and there is the only attention they seem to pay to the Master and Judas, while a decorative extension to the picture is afforded by the stately colonnaded hall and the extensive landscape in the background.

The first large Florentine representation of the *Last Supper* in which the influence of Leonardo's new composition is discernible, is Andrea del Sarto's famous fresco in the San Salvi monastery, executed 1526-1527. Andrea's *Cena,* however, is a faithful illustration of the Gospel of St. John and is thus essentially different from Leonardo's in spirit. Christ holds the bread in His hand and is about to pass it to Judas, who has now been assigned a place next to the Master, corresponding to that of John on the other side. The action proper is enacted in this central group, and from it are transmitted its emotional effects upon the other participants as revealed in gestures. The immediate sensation is exaggerated to the pitch

[1] *Cf.* Bonwick, "Egyptian Relief," and S. J. Niel, "From Crypt to Pronaos," an essay on the rise and fall of dogma.

Umbrian Master, Beginning of XVI Century, Last Supper

Foligno Cloister, Florence

Andrea del Sarto, Last Supper

San Salvi, Florence

of melodrama and the whole picture has the look of a well got-up stage performance. The apostles are good as actors, but not quite so convincing as human beings, much less as disciples. The Christ is a handsome fellow, the *star* of the piece. Leonardo's conception was far beyond Andrea, who yet feels the form in an independent and very picturesque fashion. The difference between the two works might be analyzed to great profit had we time, or if it concerned Leonardo in the least. It is, in a word, the difference between a controlled and classic utterance based upon realities, and an amazing but quite meaningless display of virtuosity, based upon facile naturalism and containing within it the seeds of a fatal decadence for a whole school,—it is, more simply, the descent from serious art to vulgarity. Of the various Venetian essays on this theme or on similar formal compositions we need not speak. While they are of great interest in themselves, and, indeed, illustrate important developments, they have little direct relation to the more classic Florentine modes.

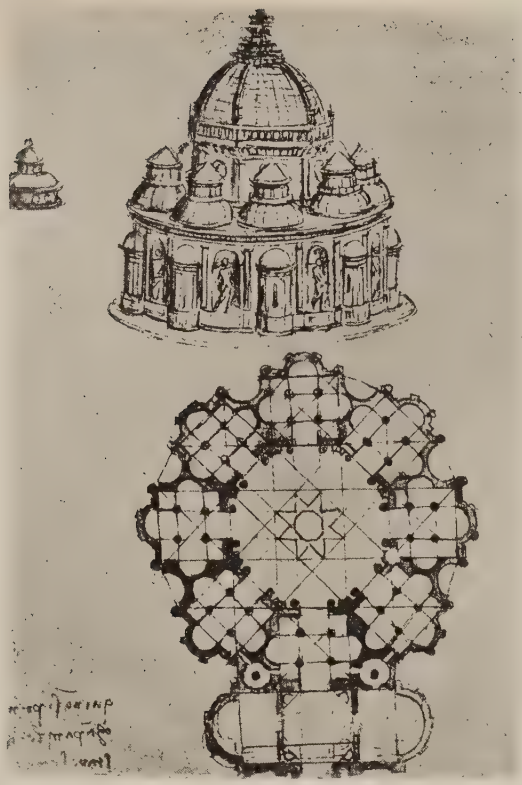
IX

ARCHITECTURAL AND SCIENTIFIC OCCUPATIONS

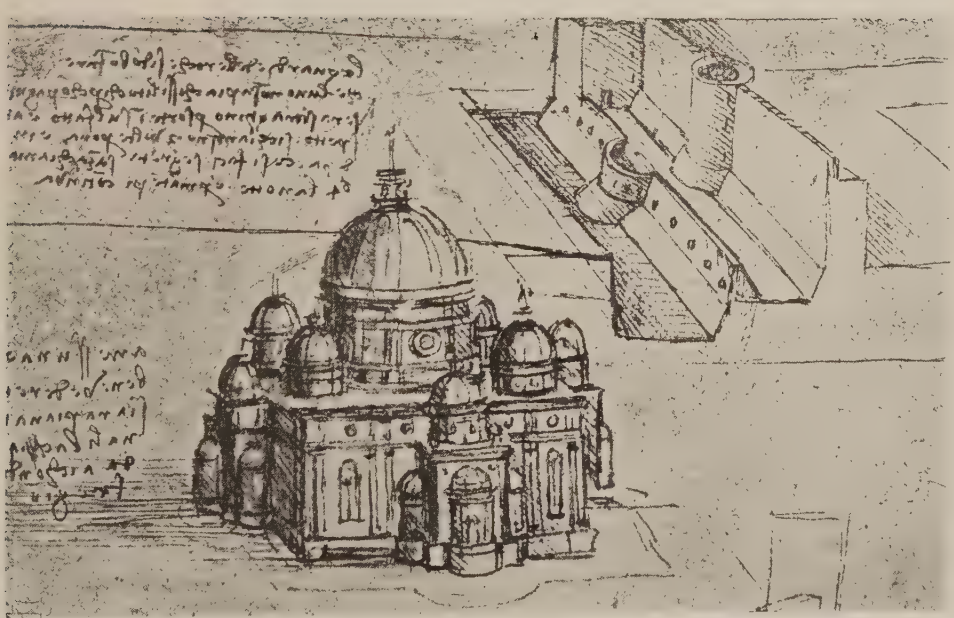
The projects for the equestrian statues clearly prove Leonardo's initiative in the theoretical study of form, in the application of the most complete scientific study to a problem in art; and this theoretical tendency is even more apparent in certain projects which had no practical aim at all but were evidently undertaken in the sheer pursuit of knowledge. As we read the mass of manuscript notes belonging to this period and to the later years of his life we find an unmistakable overlaying of immediately artistic interests by studies which seemed to his matured and somewhat disillusioned mind to be of even deeper significance than professional art. The spontaneity of earlier years yields to an unexampled research into all the inner secrets of expression, both from the side of nature and from that of formal organism and construction. In the great pictures of his later career psychological characterization and an elemental analysis are the dominant features. But the arts of painting and sculpture came less and less to occupy, except for short periods, the whole attention of the man. We find him, for instance, at this time, not only engaged with experiments or tasks of an extra-artistic kind, such as engineering duties, but also very much interested in the problems of pure architecture.

The architectural studies were overlooked by Vasari and other early writers, no doubt because they usually led to no practical results; but even to those of us who do not follow closely the study of architecture they have an importance for the understanding of the master's thought and need a brief consideration.

Leonardo often addressed himself to some difficult task or other with the object of finding the ideal solution of a purely constructive problem. When he worked at the ducal palace at the Porta Giovia he did so at bottom for the opportunity of developing his theories on fortification; and when he constructed a model for a cupola for Milan



Leonardo, Drawing for a Central Church
Manuscrit Ashburnam



Leonardo, Drawing for a Church, Suggesting Bramante's S. Peter
Manuscrit B.

Cathedral his interest seems to have been chiefly engrossed by studies of the theoretical conditions for such a work. He submitted the model to the building commissioners in 1487 but took it back again with the promise to make another, which, however, seems never to have been carried into execution. The final cupola of Milan Cathedral was, as we know, executed by Amadeo and Dolcebuono.

Leonardo was also closely connected by ties of friendship with the greatest architectural genius of that time, Donato Bramante of Urbino, who had arrived at Milan some years previous and obtained employment in the service of the Duke. Leonardo and Bramante were probably thrown together as collaborators both in permanent building work and in the execution of temporary festal decorations and the like. We come across Bramante's name several times in Leonardo's notes. A natural bond of sympathy may well have existed between the two men, both of whom, by applying the laws of harmony and of mathematical proportions to the art of building, were seeking for new and perfect solutions of problems in architectural composition.

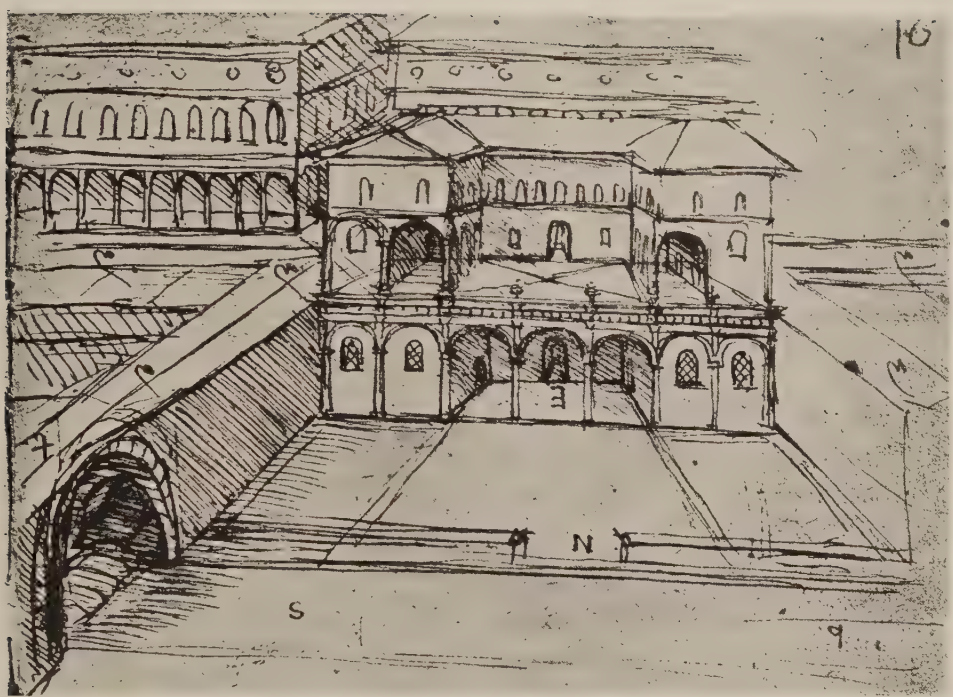
Both artists devoted their attention first and foremost to ecclesiastical buildings on a central plan. Bramante may be said to have concentrated the work of a lifetime on the endeavour to find the perfect solution for the domed central room on a circular or polygonal ground-plan; the whole of his immense influence in the sphere of ecclesiastical architecture was exerted above all in the development of this ideal type of building. There are deeper reasons for this than it is possible to enter into here. It must suffice to point out that at a time when the art of building aimed at the greatest possible harmony and beauty of spatial proportions, and when men built more with a view to spiritual expression than to mere picturesque effect, no other type of building satisfied creative genius so well as a domed central construction,—in the words of Burckhardt: "the last in the series of the absolute types of architecture."

The greater part of Leonardo's architectural designs are devoted to these problems. With painstaking care and an amazing wealth of invention he endeavours to exhaust all possible combinations of circular and polygonal ground-plans for domed churches or other monumental structures. The result is a great variety of buildings which will be better understood from a couple of sketches here repro-

duced than from any amount of description. All these compositions are dominated by the big central cupola, but around them are generally grouped smaller cupolas over side chapels, especially when the central space is polygonal. In other projects the cupola is raised on four enormous arches over a quadratic central space, from which project the limbs of a Greek cross, or apses of a more or less fantastic form. Earlier buildings, such as the cupola of the Duomo at Florence and the Baptistery in the same town, and above all the Church of San Lorenzo at Milan which was built on Roman foundations, no doubt served as sources of inspiration to Leonardo; but his drawings evince a creative architectonic imagination hardly surpassed even by any of those who have devoted themselves exclusively to the art of building. As he himself states, it was his intention to compose a treatise on the theory of cupola construction; many of his drawings should, no doubt, be regarded virtually as illustrations to it or as experiments in different solutions of what in his eyes was the most interesting problem in the craft.[1]

Mention may further be made of a number of most peculiar building projects for special purposes (which the artist in each case has specified). Thus, for example, he sketches "preaching rooms" or "teatro di predicare" on the model of ancient amphitheatres with a speaker's chair or pulpit in the middle. A domed central building with four exedras and a pulpit in the middle is designated "teatro per udire la messa." Still more peculiar is the sketch for a big assembly hall which is conic on the outside and barrel-shaped inside. The speaker's place is on a column in the middle of the room, and by the arrangement of the rising seats in diminishing circles in the upper and lower parts of the room, all the spectators would be at about the same distance from the speaker. The semi-spherical cupola rises on a gallery over the cone. But the most imposing building that Leonardo conceived was the huge mausoleum in Oriental style

[1] A systematic account of Leonardo's architectural designs has been drawn up by Baron H. von Geymüller, and has been embodied in Vol. II of Richter's work. E. Solmi supplies us with detailed information as to some of the buildings Leonardo actually executed, in Chapter V of his monograph on Leonardo. In a more recent article, "Leonardo de Vinci, Architect du château de Chambord," *Gazette des Beaux Arts*, 1913, M. Marcel Reymond tries to vindicate for Leonardo a claim as author of the original design for the famous castle at Chambord. The conjecture cannot, however, be proved by any known document from Leonardo's hand.



Some Streets in Leonardo's City-Plan. Drawing in Manuscrit B.
L'Institut de France

formed by a gigantic cone with a truncated top crowned by a temple. From a terrace in the middle of the building admission is obtained to the labyrinthine sepulchral chambers, which have been precisely drawn, with exact instructions as to measurements and masonry technique. However, neither this monumental project nor any other of his largest designs in building seems ever to have been carried into execution. Yet to us this scheme is an evidence of the immense scope and comprehensiveness of Leonardo's creative genius.

In a letter to the Duke, Leonardo even sets forth plans for an entirely new type of city. The immediate occasion seems to have been the plague that devastated Milan in 1485 and 1486. Leonardo wished to make cities more hygienic, so that people would not need to live "packed together like goats and pollute the air for one another." He proposes to the Duke to build ten cities, each with 5,000 houses and accommodating 30,000 inhabitants. These are to be situated on rivers regulated by locks. Within shall prevail light, air, and cleanliness. The width of the streets shall be equal to the height of the houses, with spacious squares and market-places. Moreover, he provides for two distinct kinds of streets on different levels, those above, noble and spotless, intended for foot-passage only, while those on the lower level are for the traffic. The latter can be kept clean by flushing from the locked rivers. Further, underneath all the streets he designs a whole labyrinth of canals, to be traversed by gondolas. The lower levels have access to the houses through back doors, so that all household supplies, "such as wood, wine, and the like," may be carried in without disturbing the fashionable approaches above. We reproduce here two of the explanatory drawings. It must be admitted that this formidable project contains valuable suggestions.

* * * *

Of greater practical value than his architectural works were Leonardo's canal constructions. An important example is the partial reconstruction of the old "Naviglio Martesana," which connects Milan with the Adige.

His estimate for this work is still extant; it totals 1,518 ducats for a canal thirty "miglia" long, eighteen braccia wide and four braccia deep. Moreover he made sketches of locks for regulating the level of the water. By means of other canals the turbulent Adige

was to be made navigable up to the Lake of Como. These projects are by no means artistic caprices or unrealizable fancies but, on the contrary, are extremely practical solutions of the problems in question, based on exact measurements and calculations. According to the opinion of specialists on the subject, Benedetto Castelli, who is considered to be the actual originator of the Lombardy canal system, appears to have learned very much from Leonardo's schemes in which practical standards for hydraulic engineering are already worked out.[1]

At the Duke's large estates at Lomellina and Vigevano, Leonardo made irrigation canals and, among other things, regulated the force of the water in a rapid river by building a channel arranged in steps "with one hundred and thirty steps a quarter of a yard high and half a yard broad," whereby was moderated the mighty stream of water which leapt at a height of fifty yards from the meadows at La Sforzesca, forming a swamp at the foot of the fall. "And by this step arrangement," Leonardo writes, "a great deal of land was irrigated and a swampy ground dried up, so that big meadows could be made from it."

* * * *

Leonardo's extensive studies in various fields of natural science can hardly be touched upon here; it lies entirely outside of our scope to discuss the geological, physical, botanical, anatomical, physiological, and astronomical notes of his manuscripts; some of them have already been collected and interpreted in a historical light by G. B. De Toni, Edmondo Solmi, Otto Werner, and others, but the greater part of these notes still await full scientific and historical analysis.[2] We shall only add a few words about Leonardo's studies in astronomy and anatomy giving some hint in regard to the wide range of his thought and of the scientific preparation of his artistic work.

[1] *Cf.* Mario Baratta, "Leonardo da Vinci ed i problemi della terra," Turin, 1903, and Seidlitz, *op. cit.*, Chap. "Exacte Naturwissenschaften."

[2] *Cf.* G. B. De Toni, "Frammenti Vinciani," Parte I-VI. E. Solmi, "Nuovi Studi sulla filosofia naturale di Leonardo da Vinci." Same, "Leonardo da Vinci ad Ivrea" [in *Bolletino Storico-bibliografico Subalpino* XVII] and other writings by the same author. Otto Werner, "Zur Physik Leonardo da Vincis," Berlin, 1913, is the latest attempt to give a full account of Leonardo's studies in physics. W. von Seidlitz includes in his book on Leonardo a good *résumé* of the master's scientific researches as far as they have been interpreted by specialists.

He conceived in imagination things so subtle and marvellous that they could not be expressed even by the most cunning hand. And so many were his fancies that while philosophizing over the works of nature he endeavoured to understand the properties of plants, to follow the movements of the heavenly bodies, and to observe the path of the moon and the courses of the sun.

These words of Vasari apprise us that Leonardo's contemporaries suspected, but by no means thoroughly grasped, the fact that the master's astronomical studies had led him to assumptions partially anticipating what Copernicus, Galileo, and Newton afterwards taught the world. He did not, of course, know the use of the telescope, and thus could not make exact astronomical investigations at great distances. He constructed, however, for his own use instruments with magnifying lenses through which he was able to study, for one thing, the prominences of the moon. It is a debatable question as to whether he really ventured to reject the Ptolemaic system, at that time universally accepted, although he sometimes seems to doubt its truth; for he once wrote in large letters in the middle of some mathematical calculations: THE SUN DOES NOT MOVE. In other jottings he appears, however, to believe that the sun does move round the earth. Yet he discovered for himself, it would seem, the law of gravitation, which he held to prevail on the moon as well as on the earth. It is outside the scope of this work to give any further account of Leonardo's astronomical notes, but we may point out that they open up that vista of infinity which results from the conception of our planet as one among thousands, of our earth as one of the countless stars of the universe.

Another study which Leonardo seems to have pursued with particular ardour during his residence at Milan was that of anatomy. On this subject Vasari gives us the following information:

He then applied himself, but with greater thoroughness, to the study of human anatomy, in which there was a mutual interchange of assistance between him and the excellent philosopher Marcantonio della Torre, who was then lecturing at Pavia and who wrote on this subject. The latter was also one of the first (as I have heard say) to elucidate the problems of medicine with the doctrine of Galen and throw light on anatomy, which had hitherto been wrapped in the darkness of ignorance. In this work he was wonderfully assisted by Leonardo's talents, work, and hand. Leonardo started a book of drawings in red chalk, hatched with the pen, of all the bodies which he dissected with his own hand and drew with the most painstaking care. In these he showed the whole structure of the bones, joining to them in due order all the sinews and covering them with the muscles; first those which are attached to the bones, then those which give stability to the body, and,

thirdly, those which bring about movement. To each separate part he made notes, in badly formed letters, written with the left hand, backwards. Unless one has practice in reading them, one cannot make them out; they cannot be read except with a mirror. A greater part of these papers on human anatomy belong to Francesco da Melzi, a Milanese noble, who in Leonardo's time was a beautiful youth, much beloved by him; he is now a handsome and lovable old man. He sets great store by these papers and preserves them as though they were relics together with a portrait of Leonardo of happy memory. Those who read these papers must find it amazing that this divine spirit should have written so well about art and also about muscles, nerves, and veins, and with such painstaking care about every matter. There are also in the possession of the Milanese painter a number of Leonardo's writings, likewise written with the left hand and in reversed characters, which deal with the art of painting and methods of drawing and colouring. This painter came not long since to Florence to visit me; he wished to have the work printed and took it to Rome to carry out his intention; but what became of it I do not know.

Leonardo's anatomical studies and notes, touched upon by Vasari in the above passage, are of such signal importance that a few details about them may not be out of place. They have been made the subject of much special investigation, out of the mass of which I shall only mention Prof. M. Holl's treatise "Die Anatomie des Leonardo da Vinci"[1] and Dr. H. Hopstock's essay "Leonardo da Vinci som anatom."[2] Both of these authors point out that many of Leonardo's anatomical representations are still unsurpassed. The drawings show, among other things, that he was able to produce excellent anatomical preparations, and they are, moreover, permeated by his clear observation and intellect. The artist's extraordinary "sapere videre"—his capacity for seeing the essential and representing it in a consummate manner—have combined with the keen eye of the scientist to produce magnificent drawings whether as respects scientific clearness or artistic beauty. As a striking example of Leonardo's entirely new and exact anatomical observations, Professor Holl points out his representations of the curvature of the pelvis and its position in the body, along with the resultant curvature of the spine; and of the thorax with the proper inclination of the ribs and division of the breast-bone; observations which only became the general property of science after Nagele's researches. In his drawing of the cranium, which Leonardo represents partly from the side (in its true horizonal position), partly in horizontal

[1] *See Archiv fur Anatomie and Psychologie,* 1905.
[2] *See Norsk Magasin for Laegevidenskapen.*

and vertical sections, he gives "in respect of accuracy and beauty, sheer perfection."

Leonardo's observations in the sphere of plastic muscular anatomy are illustrated by numerous reflections in the "Treatise on Painting." In fact he never wearies of studying the structure and movements of the human body; it is to him the grandest work of art; in it works the mysterious machinery of life which fascinates his imagination with irresistible power.

If this external fabric [of a man] seems to you of marvellous subtlety, reflect that it is nothing in comparison with the soul that dwells within this structure.

And if you have a love for these studies [anatomy] you may nevertheless perhaps be hindered by your stomach; but if it does not hinder you, you will perhaps be deterred by the dread of keeping company at midnight hours with these quartered and flayed corpses, horrible to behold. If you are not deterred by this, you perhaps lack the power of good drawing which is necessary for these representations; and if you possess it, it is perhaps not accompanied by a knowledge of perspective. But if it is so combined with the latter, you may be deficient in methods for geometrical demonstrations and for the calculation of the strength and endurance of the muscles. And possibly you lack patience and perseverance in the work. Whether all these things are found united in me the one hundred and twenty books composed by me shall testify; whether yea or nay, I shall not suffer myself to be hindered in this work either by love of money or negligence but only by lack of time. Farewell![1]

[1] The greater part of Leonardo's anatomical drawings now belong to the Royal Library at Windsor, but as yet they have been edited only in part, by Th. Sabaschnikoff and Giovanni Piumati, "De L'Anatomie, Feuillets A & B," and more recently by the Norwegian Scholars Wangesten, Fohnan and Hopstock in their beautiful publication, "Quaderni d'Anatomia . . . fogli della Royal Library di Windsor," of which as yet only two issues have appeared. The red-chalk drawings in this collection probably once formed part of the book of drawings which Vasari declares himself to have seen at the house of Francesco Melzi at Milan. The manuscripts which belonged to Melzi were scattered in many directions after his death, his son Orazio Melzi not having the slightest appreciation of their value. Some of them were acquired, by fair means or foul, by the sculptor Pompeo Leoni, who turned them to account as a lucrative article of merchandise, disposing of them partly in Madrid (where he was sculptor to the Court), partly in Milan. He took upon himself, for instance, to cut up three volumes, the contents of which were afterwards partially reassembled into a large volume, known under the name of Codice Atlantico della Biblioteca Ambrosiana. In the same Milanese library there were twelve more volumes of Leonardo's notes,—most of them left by will to the library of Count Galeazzo Arconati,—but when Napoleon conquered Milan, all these manuscripts were conveyed "in safety" to Paris. Although, on peace being concluded, it was afterwards stipulated that they were to be returned, only the Codice Atlantico came back to its old place; the rest of the manuscripts remained in the possession of the French Government and now belong to the Bibliotèque de l'Institut (Manuscrits A.-H., published by M. Ravaisson-Mollien, Paris, 1881-1891). A still larger collection of Leonardo's manuscripts and drawings are in English libraries and museums. The greater part of them are in the Library at Windsor,

altogether 234 sheets with 779 drawings besides the text, and of these only a small number are published and edited. In the Victoria and Albert Museum there are three small books of notes, and in the British Museum one. They have been made use of by several different critics, but only a small part of them have been published by Dr. J. P. Richter in his valuable work, "The Literary Works of Leonardo da Vinci," and in the publications of Ed. Rouveyre of Paris. All these manuscripts put together, however, are merely part of what Leonardo collected and wrote. Important parts have evidently been lost. To what extent these lost parts might have modified our judgment of Leonardo's importance in various spheres it is bootless to ask; but the portion that has been preserved appears to be a source of ever fresh discoveries, the ground of an ever growing esteem and admiration for a genius truly worthy to be styled universal.

X

LEONARDO'S RETURN TO FLORENCE. THE ST. ANNE

When Leonardo returned to Florence he found that the Servite Friars had entrusted to Filippino the painting of the panel for the high-altar of the Annunziata, whereupon he let fall that he himself would have liked to have the execution of it. Filippino when he heard this,—like the amiable fellow he was,—retired from the commission, and the friars,—to make sure that Leonardo should really paint the picture,—took him into their own house, defraying expenses for him and for all his companions. In spite of these precautions the artist kept them in suspense for a long time, and began nothing. At length he made a cartoon for a picture of the Madonna and St. Anne with the infant Christ. This marvellous work of Leonardo's enraptured all the artists, and, when finished, proved such an attraction to the public that for two days men and women, young and old, flocked to the room where it was exhibited as to a solemn festival. It filled everyone with amazement, for all recognized in this Madonna's face the beauty with the appealing simplicity essential in a representation of the Mother of Christ. In this figure Leonardo strove to express that modesty and humility which all ascribe to the Virgin when, filled with joy, she gazes on the beautiful child whom she hugs tenderly to her bosom, casting a glance the while also at the little St. John who is playing with a lamb. St. Anne smiles, overpowered with joy at beholding her earthly progeny thus exalted to divinity,—conceptions truly worthy of Leonardo's intellect and gifts. This cartoon afterwards went to France, as will be set forth below. Leonardo next painted the portrait of Ginevra d'Amerigo Benci,—a very beautiful thing and abandoned the work for the friars, who restored it to Filippino; but he also failed to finish it, being overtaken by death. (Vasari.)

Leonardo returned to Florence in April, 1500. He lived there together with Fra Luca Pacioli and his assistant Salai and seems during this period to have executed, among other things, the plastic models of regular and half-regular geometrical bodies for Fra Luca's work "De Divina Proportione." We know, moreover, that he was engaged on anatomical studies at the Hospital of Santa Maria Nuova. Engineering problems,—such as the continually recurring question of the regulation of the Arno,—seem also at first to have taken up his time. Very probably a year or so elapsed before he set to work in earnest on the cartoon for an altarpiece for the high-altar of the SS. Annunziata which Vasari has described. The cartoon is also described

minutely in a letter which Fra Pietro da Nuvolaria, Vicar-General of the Carmelites, sent to the Duchess Isabella d'Este at Mantua. This letter, dated the 8th of April, 1501, is a reply to the Duchess's inquiries as to Leonardo's manner of life and work at Florence. She hoped that he might be induced to paint for her at least a little picture of the Madonna "devout and sweet" (devoto e dolce) "as is his wont." Fra Pietro replied as follows:

> I have received the letter of your Excellency and will endeavour to perform what you desire as speedily and efficiently as possible. But, as far as I can see, Leonardo's life is very shifting and undependable; he seems to live only from day to day. Since he came to Florence he has only made a sketch in a cartoon. It represents Christ as a little child about a year old, reaching forward so that he almost slips out of his mother's arms to catch hold of a lamb which he hugs. The mother, half-rising from the lap of St. Anne, catches at the boy to draw him away from the lamb,—the sacrificial victim signifying Christ's Passion. St. Anne rises a little from her seat and seems desirous to restrain her daughter from separating the child from the lamb, which possibly symbolizes the Church desirous that Christ's Passion shall not be hindered. All these figures are as large as life and yet find room on a small cartoon, being either seated or bending down, and one of them (the Virgin) is a little in front of the other (St. Anne), who is turned to the left. This sketch is not yet finished. He has not executed anything else, except that two of his pupils paint portraits which he occasionally passes over with the brush. He is deep in the study of geometry and is very impatient of painting.

From this description it is manifest that the composition of the much-admired cartoon was identical with that of the well-known picture in the Louvre (and not with the cartoon in the Royal Academy of London). Vasari, however, seems never to have seen either the cartoon or the picture, but apparently described the composition from hearsay, adding the infant St. John out of his own head.

The Duchess's ardour to possess some work by Leonardo was by no means damped by this not very encouraging letter. Correspondence on the subject between her and her commissioners at Florence goes on for several years, and as it throws some light on Leonardo's method of work and state of mind during this troublous Florentine period, a few extracts may be given here.

In July, 1501, the Mantuan envoy, Manfredo de Manfredis writes: "As I had long been kept waiting for an answer as to his intentions, I despatched one of my servants to ascertain what he proposed to do. He sent me word that he could not give your Excellency

any definite answer but that, if I met you, I should mention that he had begun what your Excellency commissioned from him. . . . This is all I could learn from the said Leonardo."

We can read between the lines that the envoy was well aware that Leonardo's evasive answer was not very reassuring. At Florence Leonardo was subjected to constant pressure from all quarters; he was drawn into a perfect whirl of commissions and requests, expectations of friends and intrigues of enemies. It was more difficult than ever to find leisure for work and inclination for great undertakings. With an impetuous haste, which is also reflected in his notes, he seized the first opportunity to tear himself away from this harassing state of things and once more enter the service of a powerful and commanding personality.[1]

It is in vain that the Duchess Isabella again and again reminds Leonardo of his promises. It is in vain that she casts about for more and more persuasive phrases to induce him to execute at least a little picture of the twelve-year-old Christ,—a task which he would find a "recreation from his great works." Leonardo's thoughts were evidently bent in another direction.

To one of her last letters she received the following reply from her agent at that time, Angelo del Tovaglia: "He has been only too liberal in his promises to execute the little picture during any time he can spare from the work the Signory has commissioned. I shall not fail to urge Leonardo on as well as Perugino, who is painting the other picture for you. Both of them have given me promises, and it seems as though they were anxious to serve your Excellency; but I fear that they are vying as to which of them can delay his work longest. I cannot say which of them will outdo the other, but I suppose that Leonardo will come off victor." The prophecy was not too venturesome. The indefatigable Duchess was destined never to see a work of Leonardo's among her art treasures at Mantua.

From Fra Pietro da Nuvolaria's above-quoted letter of the 8th of April, 1501, to the Duchess Isabella d'Este at Mantua, we learn that Leonardo at this time had completed his cartoon for his large picture of *Santa Anna Metterza* (i.e., St. Anne with the Madonna and

[1] This time (1502) it was Cesare Borgia, whom Leonardo served for about a year as a military engineer.

the infant Christ in her arms).[1] The idea of the composition, the solution of the problems of form and movement, thus belong to Leonardo's second Florentine period, but the execution in colour seems to have followed long afterwards. It is also doubtful whether the picture was entirely completed by the master himself; as we now see it in the Louvre, it is in any case no adequate exponent of Leonardo's colouring and method of modelling. But in the composition, as such, it is one of his most important creations; it gives in the clearest, most concentrated form the stylistic ideal of the full High Renaissance, seen from a Leonardesque point of view. Leonardo's contemporaries seem also to have realized the unusual formal importance of the work. But when the cartoon was finished, the master addressed himself to other tasks and it would probably never have been executed in colour but for the assistance of his Milanese pupils.

The picture accompanied him to France, and it was in his studio at Amboise when Don Antonio Beato with the Cardinal of Aragon visited him in 1516; but after his death (1519) it seems to have been brought back to Italy by Francesco Melzi where it was studied by several artists. Possibly there existed also at Milan a cartoon of Leonardo's with exactly the same composition as the unfinished picture. About a century later the work was acquired by Cardinal Richelieu, and in 1636 it was presented by the Cardinal, together with various other pictures, to the King.[2]

The final cartoon for the picture is no longer extant, but there exist several smaller preparatory drawings and an earlier cartoon for a similar composition, which belongs to the Royal Academy of London, and is exhibited in its "Diploma Gallery" at Burlington House. With the aid of these preparatory studies we are enabled to follow the gradual evolution and maturing of the composition.

[1] We have no expression in English corresponding to the Latin "mettertia," the Italian "metterza," and the German "selbdritt" ("herself-the-third"). The concise and expressive term refers to St. Anne as the paramount figure in the picture, the Madonna and the Child being regarded as her attributes. St. Anne was venerated as having given birth to the immaculate, holy Virgin (cum celebrant Annæ conceptionen quatenus in utero concepit sanctam Dei genetricem, immaculatam Dei filiam, etc., according to the dogma of the Immaculate Conception); her highest and sole attribute was Mary with the Child. *Cf.* Detzel, "Christliche Ikonographie," and Riegel's treatment of the iconographic motive in "Beiträge zur Kunstgeschichte Italiens."

[2] *Cf.* Muntz, "Leonardo de Vinci," p. 288, and Herbert Cook, The Royal Academy cartoon, *Gazette des Beaux Arts*, 1897.

Leonardo, Santa Anna Metterza. Cartoon
Royal Academy, London

Italian, Beginning of XV Cent.
Sta. Anna Metterza
Prof. J. Mather, Princeton

Masaccio, Sta. Anna Metterza
Academy, Florence

Perugino, The Madonna and Her Relatives
Museum, Marseilles

This motive, in form rather cumbrous and unnatural, exhibits in most early representations a stiff, ecclesiastical composition with both the figures turned full front, one placed before the other like steps. It is only occasionally, however, that we come upon these *Santa Anna Metterza* pictures in early Italian art; it is not till the closing years of the Renaissance that they begin to appear with greater frequency as the veneration of the Madonna steadily gained ground, thus preparing the way for the doctrine of the Immaculate Conception, which was officially promulgated long afterwards.

We know very few representations of the *Santa Anna Metterza* motive from the trecento. One or two by early Sienese masters are to be found in the Siena Academy, one in the museum at Perugia and one of a very interesting compositional form is in the possession of Prof. F. J. Mather, Jr., of Princeton, New Jersey, U. S. A. This picture shows the *Santa Anna* as an imposingly large enthroned figure in full front; with the Virgin, on a much smaller scale, sitting in her lap and turned in profile to the right, holding the very big Child on her knee. The composition is entirely kept inside of the contours of the majestic Santa Anna; the other figures are simply her attributes, in full conformity with the meaning of the motive. The picture, which probably originated in the Marches about 1400, still shows a complete lack of anything like an organic unity in the formal composition of the two figures.

A characteristic example of the early quattrocento representations is Masaccio's picture in the Florentine Academy (*circa* 1424). It is composed in the traditional manner, with St. Anne seated on a throne, and Mary with the child sitting on the step of the throne, wedged in between her knees. The grandmother blesses the naked child, who in turn administers his blessing to a kneeling congregation, while angels are in attendance on the Heaven-born son. But here there is no real coherence between the figures. These regular shapes, with their blocklike massiveness, majestic in detail as they are, look more like symbols than living human beings. The artist was interested less in the movement and grouping than in exalting the human figure into a sacred image. The lack of a flexible interplay of form and of an organic grouping arising intrinsically out of natural movements is still perceptible in much later artists such as Perugino and Fra Bartolommeo. Perugino's picture in the Musée de

Longchamp at Marseilles represents not merely St. Anne with the Madonna, but also the other two Marys (the Madonna's sisters), together with their families; but the principal group is isolated and rigid, quite in accordance with archaic convention. Fra Bartolommeo's large unfinished picture in the Uffizi, which was begun about a decade later than Leonardo's, of course exhibits a far more forcible and more organic grouping than those of Perugino and Masaccio; still it has but little of Leonardo's well-balanced and concise arrangement.

In all likelihood Leonardo received the first incentive to this work through some definite commission; for the subject touched upon one of those doctrinal questions which, as he says himself, he left to the monks and to those who "by divine inspiration" have attained to religious insight. Now, as the motive contains a direct reference to the Immaculate Conception, it is a plausible supposition that it occurred to the artist while he was engaged at Milan on the altarpiece for the Confraternita della S.S. Conceptione; even if the picture which he then actually painted came to deal not with the Virgin's conception but with the birth of the Saviour. There is no positive information, however, to be gleaned from the extant drawings as to the exact origin of the compositional ideas, though it is evident that some length of time had elapsed between the execution of the first cartoon and the determination of the final composition for the picture. There is nothing to prevent our assuming that the former had already seen the light at Milan. The famous Florentine cartoon, as we have said, exhibited considerable divergences from the composition of the Louvre picture.

In the first composition,—the Burlington House cartoon,—the side by side method of grouping still to some extent obtains. Mary is seated with only one of her legs resting upon St. Anne's lap; she stretches the other out sideways and puts one foot upon the ground. The upper part of the body fronts us, like that of the mother, and the two heads are on the same level, turned half-way towards one another as if of rival interest. Like the formal composition, the psychological effect is also to a certain extent divided, although the artist's effort after a uniform pyramidal composition is clearly discernible. The infant John leans forward as a counterpoise to Mary's lower limbs as seen in profile; the contours are thus made to ascend

from either side, but the top is broken, the apex of the triangle being split in two. The compositional harmony, however, is otherwise so complete that the shortcomings just referred to would hardly attract notice if we had not Leonardo's later and more perfect composition to compare with it. The art of the figures in themselves has called forth the amplest encomiums: "One can scarcely find draped figures conceived in a more plastic way without going back centuries to those female figures which were once clustered together on the gable of the Parthenon," writes Berenson, referring to this cartoon.[1]

The most admirable thing about the Burlington House drawing, however, is that the artist, in spite of an extraordinary design and a very definite modelling, has contrived to retain a picturesque *sfumato,* or chiaroscuro, which conduces above all to give life to the figures. The representation of the Madonna in this respect can vie with the portrait of Mona Lisa. Berenson also points out that one may search elsewhere in Italian painting in vain for draperies which, although completely revealing the form and movement of the parts they clothe, can nevertheless be imagined as capable of removal like real clothes. Nothing can appear more natural, more simple, more matter-of-fact than the way in which these women are draped, and it is just here that the artist asserts his supreme mastery.

Leonardo's superiority in these respects will be more forcibly realized by comparing the cartoon with the attempts of later artists to reproduce it. Thus the genial Bernardino Luini has rendered Leonardo's composition pretty faithfully in a picture in the Ambrosiana Gallery (with the mere addition of Joseph on one side), but he has entirely failed to catch Leonardo's union of delicacy with vigour in the modelling. Instead of the ample, goddess-like figure which represents Mary in Leonardo's cartoon, Luini presents a rather slender, sweet-looking girl sitting on her mother's lap; and the latter has become a lean old woman with sunken cheeks and a simpering smile. He seems to have aimed at greater flexibility and elegance at the expense of plastic firmness in design and relief.

Two small drawings,—one in the British Museum and the other in the Louvre,—sketched in black chalk and worked over with pen and bistre, give a forcible idea of how the artist had to struggle with this compositional motive. He searches out expedients for getting

1 The Drawings of Florentine Painters, Vol. I, p. 157.

one adult figure in the lap of the other without awkwardly overloading the group. This bewildering maze of lines discovers a number of interesting departures from the Burlington House composition. Mary is no longer balanced with one leg on St. Anne's knee, but sits entirely in her mother's lap, and, while holding the child as in the cartoon, she turns at her hips, bringing shoulders and head almost in profile, thus contrasting with St. Anne's head, which is full face. The weak point here is the obvious instability of Mary's seat—will she lose her balance? The artist tries to adjust this matter in his arrangement of the legs and arms to left and right, respectively, but the posture is still strained and insecure. On the other hand, the sketch improves on the cartoon in its more consistently triangular grouping.

A considerably later period in the evolution of the composition is marked by a little pen-sketch in the Venetian Academy. The artist now strikes out on a new scheme for the group; he no longer places Mary in front of St. Anne, more or less turned in the same direction, but sitting athwart St. Anne's knee. The figures are thus knit together and at the same time brought into contrast. The strained effect in the body of the Virgin is entirely avoided; she merely leans a little backwards in order to maintain her balance as she holds the sturdy boy in her arms; the Christ Child leans forward, playing with a lamb, now substituted for the worshipping St. John. But there remains a certain indecision in St. Anne's posture, particularly in the turn of her head. Leonardo has made a number of designs for the latter motive, in the endeavour to bring the group together within a statically pyramidal form. The chief difficulty, inherent in the theme itself, is always that of not letting the figure in front hide the one behind it, and the problem is reduced in the upshot to one of movement, only to be solved by a sovereign control over all possible plastic combinations in the dynamics of the human body.

The final solution of this problem is exhibited in the large picture in the Louvre. Mary now leans forward, leaving the head and neck of the St. Anne entirely visible. The Child is placed on the ground at the Virgin's feet, playing with the lamb. The pyramid is thus a closed one. The postures are clear and explicable and take up no more room together than St. Anne alone would have done. The compositional development within this series is thus marked by an ever

Leonardo, Study for St. Anne
British Museum

Leonardo, Study for St. Anne
Academy, Venice

Leonardo, Study for St. Anne
Louvre

Leonardo, Study for St. Anne's Head
Windsor

Leonardo, St. Anne with the Madonna (Unfinished)

Louvre

greater compression of the figures without the sacrifice of volume or monumental gravity. The group is enclosed within the narrowest possible periphery by the greatest attainable contraction of movement and posture. Just as in the architectonic of great verse or great music, so in this graphic design, a formal concentration, achieved only after the most painstaking effort, emerges to new emotional life and accentuates the energy, the dynamic power of the thought. The imposing grandeur of the ensemble is due to the fact that the single motives are no longer isolated, but reinforce each other in an harmonic unity which is also a vital emancipation. They may now at any moment escape the bounds of the composition. Few pictures can give us such a lesson on what can best be described as creative construction in art.

Having once found his compositional form the artist could then pass to the elaboration of important details such as the heads and the draperies. There are extant studies for the heads of both Mary and Anne; the former once belonged to the late Dr. Ludwig Mond's collection in London, the other is at Windsor. The most complete design for the drapery is the large black-chalk drawing for the Virgin's mantle in the Louvre. All of these efforts show Leonardo at the summit of his attainment as a draughtsman. They reveal a richer artistic faculty, a greater tranquillity and breadth of expression than the engaging early studies. The pure, winning charm has not vanished from these faces, but it is subordinated to a feeling of august serenity and is modulated in an infinitely sensitive chiaroscuro. Leonardo draws St. Anne's head with the lightest hand; the soft black chalk has barely touched the paper, but the head is as living and real as in the painting. It shows to a superlative degree the poet's faculty in craftsmanship,—the gift of making dreams come true, and of shrouding reality with a mystical delight.

In the studies for the draperies it is once more the character of the stuffs and the fall of the folds that chiefly claim the artist's attention; but, while his treatment of these matters evidences the most minute and careful observation, he maintains a monumental harmony and breadth worthy of the best Greek sculptors. His extraordinary study of the representation of drapery is shown in several passages of the "Treatise on Painting" from which we make a brief excerpt:

The costumes should be painted with their folds closing well round the limbs of the figures, but on the illuminated side there should be no folds with deep shadows, and on the shaded side none with too bright lights. The folds should, in places, follow the drawing of the limbs they cover, and they must not be of such a nature as to cut up the form of the limbs, nor should they show shadows that penetrate further than the surface of the clothed body. And as to the object of the costume,—it should not look as if it did not clothe anyone, nor as if it were merely a heap of doffed garments such as may be seen in the work of many painters who so dote on various combinations of folds that they entirely conceal their figures with them, forgetting the proper purpose of the costume, which is to cover and surround the limbs in a pleasing way and not to disturb their relief by puffy swellings and flaccid, inflated forms.

Leonardo may have written this with reference to the overcharged style of drapery which he saw about him in his youth in Verrocchio's studio. The following advice, from the same treatise was also perhaps occasioned by his youthful experience, for in Verrocchio's studio it was the practice to draw draperies from pieces of cloth stiffened with plaster: "You should paint the folds from nature, so that if you want to render wool, you should also make the folds from wool, but if you want to make a silk dress, or one of fine cloth, or one which the peasants use, or one of linen, you should in each individual case make the folds according to the nature of the cloth and not accustom yourself, as is done by some artists, to using paper or leather over clay models in arranging the drapery, for you will thus greatly mislead yourself."

The finished painting of the *St. Anne with the Virgin and Child,* as we have said, does not reveal much of the lovely details and finish in the stuffs exhibited by the preliminary studies. For one thing, it has lost its surfaces, and indeed, the painting seems never to have been completely finished. The originally blue mantle of the Virgin is now unctuous and waxy, and the foreground has taken on a heavy tone of brown, which, about the centre line of the picture, suddenly passes over into an icy blue. For it is here that the imaginative background landscape begins, with its rows of deeply furrowed rocky peaks and winding streams, the whole scene being wrapped in a bluish haze which leaves the impression of a fairy land of mountain glaciers. The final surfaces are probably missing here. Yet, however strange this background seems, it is a highly characteristic and beautiful development of the landscape in the *Mona Lisa* and is possibly based upon Alpine effects, such as those we find in his late

drawings at Windsor. The great tree at the right—at once decoratively just in relation to figures and distance, and independently notable as perhaps the grandest tree in all European art—marks Leonardo's emancipation from the formality of the foliage screen in the Uffizi *Annunciation* and the somewhat conventional palm in the *Adoration.* It should be compared with some of Giotto's trees in the Arena frescoes at Padua, and the trees of Piero dei Franceschi, as the culmination of a long progression in style.

In the flesh-tones, again, the under-painting appears to have reached the surface, producing a reddish distortion of the general colour-tone. Finally it should be pointed out that the shape of the picture has been altered (though before modern times) by the addition of rather broad pieces on both sides. One of the boundary lines originally ran close up to the projecting folds of Mary's mantle, and the other almost up to the tail of the lamb, the figure composition thus filled its oblong much more harmoniously, as may be seen by a comparison with the rightly proportioned cartoon in London.

The two principal figures express somewhat contrasted ideals of feminine beauty, with marked individual features. Mary is the happy sunny mother. Her face radiates love and devotion as she leans forward as if to catch or hold back the Child, who strains away in his effort to fondle the lamb. Her smile is bright, without a trace of the enigmatic expression usually present in the smile of Leonardo's women, particularly in those portrayed in his later works. St. Anne's face is more reminiscent of the *Mona Lisa,* and the features are sharper, the smile colder, the expression more contemplative than Mary's. Her age in relation to her daughter is hardly apparent, except that body and features are a little thinner than those of the blooming young Madonna.

Both assume sitting postures which, in spite of compression, disclose their powerful build. In the St. Anne the *contraposto* between the upper part of the body and the knees is fully emphasized. She turns obliquely outwards but twists her shoulders to full face and bends her left elbow inwards, thereby marking more distinctly that diagonal leading *au fond* along which the figure is placed. The Virgin is turned in the opposite direction, likewise obliquely outwards; the leading lines of movement in the two figures cutting one another almost at right angles. But the action in Mary's figure is

more complicated than in that of her mother. The Virgin bends forward to the furthest possible point, maintaining her balance by resting her foot on the ground, and at the same time making a turn at the hips, thus bringing the breast a little more to the front. Her movement is echoed to a certain extent by the boy with his outward swerve. By this accent on the leading lines for the placing and movement of the figures the depth of space is vigorously realized and the pyramidal mass is made more distinct than in any previous composition. The apex is clearly emphasized by St. Anne's head, that point of convergence which Leonardo succeeded in extricating out of the involved play of lines only after so much toil over the preparatory studies. We notice also that the elbow of the saint serves as a formal support to the Virgin's inclined head. If we imagine this elbow removed, the head would no longer range itself properly in the ensemble.

Old authors lavish as much praise on the postures of these figures as on their captivating expression and engaging faces. Florence never before had seen a work of art combining such extraordinary firmness and excellence of composition with such radiant beauty in the separate figures. Perugino and Fra Bartolommeo had, indeed, indicated in what direction the new ideal of style was to be sought; they had introduced the solemn, tranquil *tempo,* and the well-defined patterns; but neither of them ever acquired such a mastery over figure movement as was Leonardo's, nor did they possess any deep insight into characterization. The Madonna and the saints in their pictures are half-supernatural beings who scarcely dare betray their purely human feelings of love and happiness.

Leonardo was unfettered by ecclesiastical tradition. He was still the artist and investigator of nature, even when he represented dogmatic motives such as the *Santa Anna Metterza.* He cared less for the subject as illustration than for the opportunity of presenting a perfect figurative construction in intricate yet perfectly justified action. It was this feature, of course, that enticed so many contemporary artists to imitate the composition in more or less faithful manner.

* * * *

In Florence the work was not directly copied, but, as will be seen, several Florentine painters received strong impressions from the new type of composition and transposed them into independent

B. Luini, St. Anne with the Holy Family

Ambrosiana, Milan

Copy after Leonardo's St. Anne

Earl of Yarborough's Coll.

Lanino, St. Anne with the Madonna

Brera, Milan

Cesare da Sesto, Madonna with the Lamb

Museo Poldi Pezzoli, Milan

creations. In Milan, on the other hand, where the circle of Leonardo's pupils was more inclined to servility the *Santa Anna Metterza* was copied—entirely or partially—by several painters. Among these Milanese copies—said to number about twenty-four in all—only five need be noticed: the first, which is in the Strassburg Museum, was executed, according to Mueller-Walde, from an earlier cartoon by Leonardo; the second, in the Leuchtenberg Gallery at St. Petersburg, is ascribed to Salaino; that in the Prado Museum at Madrid is attributed to Cesare da Sesto, while another is in the Earl of Yarborough's collection.[1] Finally the one in the Brera Gallery at Milan, painted by Bernardino Lanino, is interesting as an illustration of the vain efforts of the later artists to retain the natural charm of Leonardo's picture. St. Anne has here become a grinning, toothless old woman and Mary a sentimental schoolgirl. The whole picture has been travestied in a spirit of insipid coquetry and set in an interior which allows no opportunity for plastic suggestion.

Cesare da Sesto's copy in the Prado, and his little picture of the Virgin alone with the Child and the lamb, in the Museo Poldi-Pezzoli at Milan (also attributed to Giovan Pedrino), have considerable character. The Madonna in these renditions sits on a stone instead of on St. Anne's lap and is in silhouette against the clear air. There is vivid action and some of Leonardo's energy in the picture, but the face of the Virgin has become merely sentimental and the importance of St. Anne has been minimized. This iconographical modification gives us reason to suppose that Vasari was expressing popular opinion when he deprecated the cult of St. Anne.

Among artists who paraphrased Leonardo's compositional motive freely, Raphael is, of course, the chief. During his Florentine period (1504-1508) the younger artist seems to have stood in close relations of friendship to the elder, and to have had an opportunity to see and copy several of the revered master's compositions. He afterwards used the drawings—as we have already had occasion to notice several times—as a *point d'appui* and an aid in his own designs. In this particular connection attention should be called to Raphael's *Holy Family with the Lamb* in the Prado at Madrid. The

[1] *See* Herbert Cook, Leonardo da Vinci and some copies. *Burlington Magazine*, December, 1911. Cook emphasizes the special value of the Leuchtenberg copy, because it is traditionally ascribed to Salaino, Leonardo's favourite pupil.

composition here, as in Leonardo's picture, shows two adult figures together with the Child and the lamb; here, too, the Virgin is holding and supporting the boy, who climbs up on the lamb's back. Mary, indeed, kneels instead of sitting, and Joseph stands behind her leaning on a long staff; these modifications, however, are not very radical changes. What we miss is the masterly organization of the figures into a self-sufficient group; their movements—entirely parallel, closely following the front plane of the picture—have almost no plastic effect. Raphael does not build up a big, well-defined pyramidal structure like that of Leonardo's picture. There are other cases, for example, in the *Madonna Canigiani* at Munich, where he constructs a massy effect but complicates it with more figures, thus facilitating the construction with added features but with some loss of power. Raphael's manifold units of structure and the clearly defined triangular circumference in such a work as the *Madonna Canigiani* are in fact just as much reminiscences of the *Madonna of the Grotto* as of the *Santa Anna Metterza.* The influence of the latter upon Raphael seems to appear most clearly in the big spacing and proportion of his best votive pictures. On the other hand, Raphael seldom tries to emulate Leonardo's energy and life; it was not his nature. Raphael's design tends to static repose,—Leonardo's to dynamic force.

The only artist who could seriously enter the lists with Leonardo in the more vital elements of figure composition was, of course, Michelangelo. His *tondo* of the *Holy Family* (the *Doni Madonna*) in the Uffizi, is, as a dynamic group, a fellow to Leonardo's *St. Anne* in power of design. As we know that Michelangelo was eager to rival Leonardo in honourable, if somewhat jealous, competition, he may well have composed the Doni *tondo* as a challenge to the older master's cartoon, so much admired and so highly praised in the Florence of the time. It belongs at all events to the same remarkable outburst of the Florentine High Renaissance. Both compositions present consummate solutions of problems then at the beginning of a new period of style and taste, "in the air." Buonarotti worked with substantially the same factors of design as did Leonardo, although he chose the circle instead of the triangle as a fundamental determinant of form. The effort to contract the figures into a muscular nugget or knot, as it were, and to compress them into the smallest possible

Raphael, Holy Family with the Lamb
Prado, Madrid

Raphael, Madonna Canigiani
Munich

Fra Bartolommeo, St. Elisabeth with the Madonna
Cook Coll., Richmond

Michelangelo, The Holy Family
Uffizi, Florence

space is even more evident in him than in the earlier master. The accentuation of will, the formal restraint, the *tour de force* of the whole performance are more marked in Michelangelo than in Leonardo, and consequently the æsthetic impression is not quite so supple and buoyant as in the *St. Anne.*

Any comparison of the two artists, however, must be unfair to both. Leonardo and Michelangelo were quite incompatible spirits. The beauty of the Doni *Holy Family* consists largely in its reflection of the heroic and Olympian calm of Græco-Roman art at its best, as interpreted by a personal energy narrowly directed to the human figure in its most intrinsic character. Michelangelo's expression in this early work is far less intimate and sympathetic, less near and familiar than Leonardo's. On the other hand, it is thoroughly classic and predetermined in a fashion which Leonardo hardly understood. The two pictures are not akin. The two masters could learn little from each other, but they complement each other. When we think also of Raphael, whose relation to Leonardo we have touched upon, and of Giorgione in Venice, working at about this time in the *Madonna of Castelfranco* upon the problems of colour and tone, which were to build up still other types of painting and to start Titian and the moderns on their path, and finally of Correggio only too ready to spend his artistic substance, the contours of High Renaissance genius begin to emerge in all their clearness. It is as fellow-workers in an infinite task that these creative geniuses must, in the end, appeal to the historic instinct. Unfinished and inchoate as it is, the *St. Anne* is one of the supreme achievements in art, the first complete attainment of the ideal aims of the High Renaissance.

Among contemporary Florentine artists, Fra Bartolommeo was doubtless the one who best understood Leonardo's innovations. In spite of the enormous difference in temperament and talent, and although the one worked in rapture over the beauty of nature, while the other to a certain extent still paid tribute to traditional convention, Leonardo and Fra Bartolommeo met on common ground in their seriousness and dignity, while round about them the quattrocento style was for the most part in a state of decline. Both of them had received their training in the Florence of the fifteenth century and well knew the mannerisms and formulas which were applied in the old studios (several polemical utterances in the "Treatise" would

in themselves show this). The limitations and the superficiality of the "naturalism" of their younger days seem gradually to have been realized by them with greater and greater clearness the more they endeavoured to represent human beings endowed with mightier souls and capable of deeper passions than the artists had up to that time allotted to them. Monumental tone was imparted to the forms, not by schematic amplification, but by accentuating the salient features in the tectonic structure of the figures, the cubic proportions, and the clear *contraposto* movements,—the pragmatic points of the new style.

Among Fra Bartolommeo's smaller and more attractive pictures there are two which, compositionally, may have been influenced by Leonardo's *St. Anne,* viz., the *Holy Family* in the Galleria Nazionale at Rome, and the *Madonna with Elizabeth and the Two Boys* in the Cook Collection at Richmond. The pictures are uniformly composed, only that Joseph in one case replaces Elizabeth. Mary is seated on a cushion or a stone with her face in profile, holding the Child Jesus in a leaning position towards his kneeling playmate whom he clasps round the neck. Behind the children, Joseph (or Elizabeth), kneels at Mary's side, bent a little forward, forming the termination of the clearly defined pyramid. It is true that the figures are not linked together with such intricate action as in Leonardo's or Michelangelo's pictures; they are arranged more according to the principles of Raphael's Canigiani picture; but their proportion in the field is calculated in the same way as in Leonardo's work, and the fundamental form of the composition is inspired from the same source. This is all the more remarkable as Fra Bartolommeo's small pictures were painted at a time when Leonardo had already left Italy and Raphael had, in a sense, taken up his mantle in the domain of painting. In a number of earlier paintings,—for instance, the magnificent altar-piece in the Cathedral of Lucca,—Fra Bartolommeo created figures which, in their soft modelling and also in their bearing and characterization are even more Leonardesque in type.

XI

THE PORTRAITS

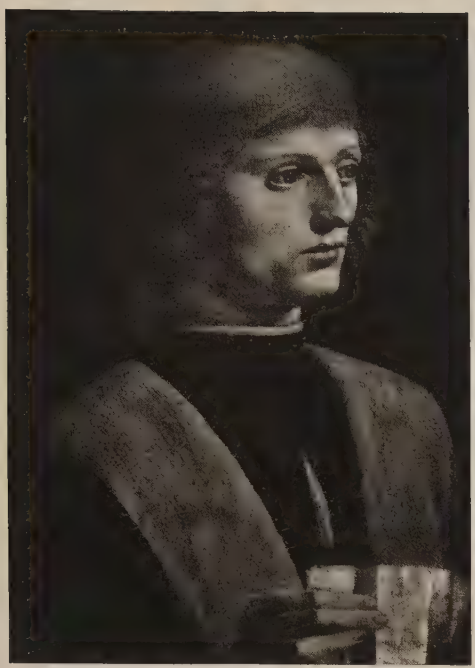
In the masterpieces so far considered Leonardo's insight into human character tends to typical generalization or dramatic expression rather than to individual analysis for itself. In no case, indeed, not even in the slightest memoranda, do we find the image vague or casual; his types and his drama are always based on nature, although never the translation of merely external phenomena. But the absence of actual portraiture, intended as such, within the groups of participants in his pictorial action is remarkable when we think of the Florentine and Umbro-Florentine practice as a whole in this respect. Moreover, as far as we can discover from the studies of the Sforza and Trivulzi monuments, the psychology of his equestrian figures was chiefly that of their embodiment of a life and action transcending the visual expression of character as an object of contemplation and analysis, while in the *Adoration* and the *Last Supper* the individual types which objectivate the scenes are subordinated to a general effect,—they seem less the sole actors in the drama than representatives of action and expression at large. In a word, they have more of a general conceptual value than of actual isolated realization.

In pure portraiture, on the other hand, Leonardo aims in the first place at a profound delineation of the soul-life of the individual. To this end he discards all fortuitous accessories and all dramatic factors in order to make an intimate characterization his chief aim. Few artists seem to have cherished a higher ideal of the mission of portrait painting. In the introduction to the "Trattato," where he most adroitly vindicates the superiority of painting to poetry, he writes as follows: "Lovers who have before them an image of the beloved object are brought to speak to the painted image. Peoples are brought with fervent vows to seek the gods." Contemporary authors mention in terms of the highest praise his portraits of Ginevra Benci, Cecilia Gallerani, Isabella d'Este, and Mona Lisa

del Giocondo. They are all portraits of women whom we know to have been distinguished for uncommon spirituality, intelligence, or beauty. This circumstance—and it can hardly be accidental—is a proof of Leonardo's absorbing interest in feminine character. If we think for a moment of Raphael's or Titian's women, Leonardo's trenchant and intimate analysis becomes all the more extraordinary. In his study of women Leonardo stands alone, nor can we interpret his relation to them by any self-revelation beyond that of his marvellous art. That there is something of this power in the *Lady of the Junipers* has already made us half-willing to accept an ascription to the master, but with the *Mona Lisa* even more than an individual subject is in our thought, for the picture is, in a manner, quintessential as a monument to the feminine character. In Leonardo's male portraits the extant examples are confined to drawings, and the purely individual interest is much less than that of salient physical or mental types, often of merely picturesque character and, at times, in the vein of downright caricature. The close analysis of his fellowmen—or like Rembrandt, of his own physiognomy—appealed to him strongly yet seldom went beyond the stage where, as in the *Adoration* and the *Last Supper,* he could exploit some dramatic motive.

The only male portrait now ascribed to Leonardo is the so-called *Musician* in the Ambrosiana Gallery at Milan. As is well known, Morelli was the first to protest against the traditional ascription and attributed the picture to Ambrogio Preda. The positive side of his criticism is, however, certainly wrong; Preda is an artist who never attained that degree of plastic expressiveness which this portrait exhibits; even his best performances, such, for instance, as the portraits in the National Gallery and in the Cook Collection at Richmond, retain a certain wooden stiffness, a leathery flesh colouring. The picture in the Ambrosiana Collection has, moreover, benefited considerably since Morelli's time, by a thorough cleaning, which, amongst other things, brought to light the hand with the sheet of music. The subject of the picture has thus been signalized as a musician, and he has in fact conjecturally been identified with Francesco Gaffurio, orchestral conductor at the Court of Lodovico il Moro, an identification, however, which still remains entirely unproved.

The composition of the portrait is the simplest possible. Head



Boltraffio, Portrait of a Musician

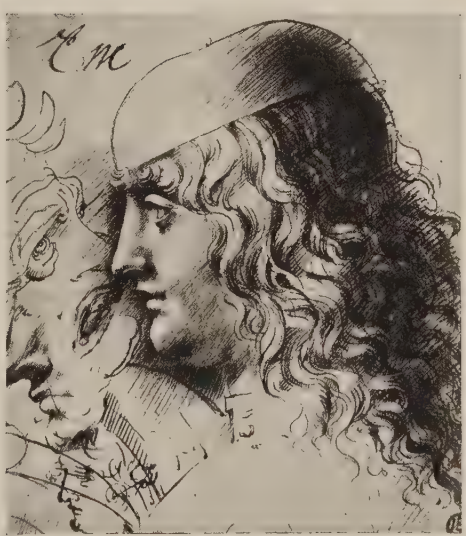
Ambrosiana, Milan

Ambrogio Preda, Portrait of a Young Man

National Gallery, London

Boltraffio, Madonna, Saints and Donors

Louvre



Boltraffio, Drawing of Heads

Louvre

and shoulders are turned three-quarters to the right, without any *contraposto*. The powerfully built face is framed in by luxuriant locks and the head is covered by a little red cap, but this as well as the black costume is left unfinished, and the hand with the sheet of music is now badly defaced by time. But this very characteristic hand, in conjunction with the peculiar drawing of the eyelids, offers us the surest clue to the origin of the picture. It is not Leonardo's nervous, elastic type of hand, and still less the clawlike organ which we find in Ambrogio Preda's pictures. (Compare the portrait in the National Gallery.) It is a strong and manly hand, stiff rather than supple. We find its counterpart in Boltraffio's large altarpiece in the Louvre, where the big clasped hands of the kneeling donor show the same broad palms, elongated fingers, and square nails of the Ambrosiana portrait. If we examine the drawing of the eyes we also find the same thick and protruding lower eyelids. And the eyes are a little out of drawing, one being lower than the other, as is the case in most of Boltraffio's paintings and especially his Madonnas. Several drawings of his also tend to support our attribution of this portrait to Boltraffio, the study of a young man's head in the Louvre being especially valuable in this connection. It is almost the same head as in our painting, covered with the same little cap, and, although the drawing has been attributed to Leonardo, there cannot be any doubt that it is by Boltraffio. It shows his firm touch and his somewhat stiff line, the shading is from the right to the left, and not in the opposite direction as in Leonardo's drawings. Other examples of Boltraffio would strengthen our attribution, but we must not dwell too long on a work which, whatever it may be, is surely not by Leonardo. After pointing out that the somewhat minute modelling in spots and unrelated planes is characteristic of Boltraffio we must state, that he comes here much nearer to Leonardo than in most of his paintings; it is evidently a comparatively early work.[1]

The popular portrait of a woman in the same collection, which was formerly honoured with Leonardo's name and was even looked upon as a pendant to the *Musician* (who, for reasons unknown, passed

[1] Boltraffio has also been suggested as the most probable author of this much discussed portrait by Sir Charles Holroyd.

as Duke Lodovico), was also attributed by Morelli to Ambrogio Preda. The majority of critics, even those who cannot follow him in his attribution of the male portrait to the same painter, will probably agree with him in this case. The severe pose of the profile and the accentuated contours testify plainly to the Milanese quattrocentist, who, moreover, in his capacity of court painter, appears to have acquired a special skill in the delineation of the toilet. The undeniable charm of the picture is due not a little to details of costume and to the traditional elegance of the whole attire, and withal to the bright look and girlish sweetness of the pretty face. It is quite possible that the picture represents the Duke's young wife, Beatrice d'Este, although the resemblance to other portraits of the spirited Duchess is not quite convincing.

Another female portrait which is often attributed to Leonardo, and indeed on better evidence, is the *Lady with the Weasel* in the Czartoryski Collection at Cracaw. The portrait has great charm, especially in the momentary listening pose and the nervously animated hand which rests on the lithe weasel. The bust is placed along one of the diagonals of the depth, but the head is turned in the opposite direction,—something has suddenly caught the young beauty's attention,—her expression is alertly observant, the whole effect has something animal-like in its mobile suppleness. Still, in spite of this captivating and expressive movement, one observes on closer examination that the drawing lacks vitality and the modelling of the face is rather unstructural. We look here in vain for Leonardo's penetrating sense of form and structure. The picture shows in many parts the same somewhat disjointed and superficial treatment as the *Musician* in the Ambrosiana; a comparison between the hands of the lady and those of the men reveals striking likenesses, and a still more convincing proof of the identity of the master is afforded by the drawing of the eyes. What has been said about the drawing of the eyes in the portrait of the *Musician* is also applicable to that of the *Lady with the Weasel.* We accordingly believe that this picture, likewise, is a work by Boltraffio, although he here comes closer to Leonardo; it is possible even that he has utilized some compositional drawing by the master. The picture has been identified with Leonardo's portrait of *Cecilia Gallerani* mentioned by Vasari and other authors, but

Cristoforo Romano, Portrait-Bust of Beatrice d'Este

Louvre

Ambrogio Preda, Portrait of Beatrice d'Este (?)

Ambrosiana, Milan

Boltraffio, The Lady with the Weasel

Czartoryski Coll., Cracovia

Leonardo's Workshop

La belle Ferroniere

Louvre

Leonardo, Female Portrait
Pen-Drawing
Windsor

Leonardo, Study of a Condottiere
British Museum

Leonardo, Portrait of
Isabella d'Este
Louvre

Pollajuolo (?) Female Portrait
Museo Poldi Pezzoli, Milan

until further proof is brought forward this identification remains sheer conjecture.[1]

The famous *Belle Ferronière* of the Louvre is something of a disappointment and a puzzle. We feel that there must be a drawing by the master back of this image, for the characterization is Leonardesque, both in its reality and in its hint of something inscrutable in the expression. But the painting, as painting, is tame and rather heavy and flat in its dull red and brownish blackish tones, the modelling being quite without life in light and dark. The composition, a half-profile to the left, looking outwards, without showing the hands and against a dark background, is rather baldly simple, considered in its present condition as a finished painting. The picture belongs, we think, to a pupil of ability,—perhaps, as some have thought,—to Boltraffio.

Of far greater interest is the stately red- and black-chalk drawing in the Louvre, which has been considered to represent Isabella d'Este. Its pricked outlines show that in all likelihood it was once used for a painting; but this painting could not have been by Leonardo himself. As late as the year 1504 the Duchess reminded Leonardo in vain of his promise to paint a portrait of her, writing him: "When you were in this city and made our portrait in chalk you promised that one day you would execute it in colour." Moreover, we know how intensely eager the noble Duchess was to gain possession of some work of the master, however inconsiderable.

The drawing, which has evidently passed through many hands, is somewhat rubbed, yet to this day radiates an engaging freshness and life. A faint smile illumines the features, while the intelligent eyes follow the interlocutor who seems to absorb her whole attention. Perhaps Leonardo is amusing the Duchess with one of his stories. But, while interpreting so admirably a momentary mood, the artist also expresses the aristocratic character of the lady and creates a monumental type, imposing in the breadth and vigour of the form and in the power and dignity of the bearing and expression. She is a woman who knows what she wants, and wants only what is best.

[1] *Cf.* an article on this subject in the *Burlington Magazine*, X, 309: "A newly discovered portrait by Ambrogio de Predis" by A. Edith Hewett, with the editor's note pointing out that the weasel, being in Greek *galaie*, possibly might have a bearing on the name Gallerani.

What seems most novel in form and stylistic expression in this portrait is the *contraposto,* the turn of the head from the breast, and the introduction of the expressive hands. We involuntarily think of the precept in the "Treatise on Painting": "Always make the figure so that the bosom is not turned in the same direction as the head; for Nature gave us for our convenience the neck, which can easily be moved in different directions according as the eye seeks out different objects." The breast is developed in its greatest possible width and is placed diagonally so that the arms abut on the borders of the drawing. The contours sweep in quiet and uniform undulations, and there is no trace of the rigid, rather uneasy, jerky rhythm which often characterizes the portrait drawing of the Florentine quattrocento, as, for instance, in the famous girl's profile, attributed to Antonio Pollajuolo in the Poldi-Pezzoli Museum at Milan, and such as is still perceptible in Leonardo's early portrait studies. In this drawing we find inaugurated, in fact, the fully developed and perfected portrait composition of the High Renaissance.

* * * *

However, none of Leonardo's early portraits, or studies for them, can compare in artistic or historic value with the one he painted at the beginning of the sixteenth century—probably 1503-1506 on his return from his military travels with Cesare Borgia. This was of the Neapolitan lady, Mona Lisa Gherardini, who in 1495 had become the wife of Francesco del Giocondo, an eminent Florentine nobleman. Along with the *Santa Anna Metterza* and the cartoon for the large fresco in the Palazzo Signoria,—the celebrated *Battle of the Standard,*—this portrait has at all periods been looked upon as the greatest artistic achievement of Leonardo's later Florentine period, which, in some respects may be considered as the culmination of his entire creative activity. Vasari gives us the following enthusiastic description of this portrait:

> Leonardo undertook to paint for Francesco del Giocondo a portrait of his wife, Mona Lisa. He lingered over it four years and left it unfinished. It is at present in the possession of the French King Francis, at Fontainebleau. In this head anyone who wished to see how closely art could come to imitating nature could easily do so; since here were rendered all those minute niceties which can only be painted with the most delicate means; the eyes had that lustre and liquid effulgence which are always to be observed in real life, and around them were all those rosy and pearly tints together with the eyelashes

which could not have been depicted except by the greatest subtlety. The eyebrows, likewise, were rendered in so natural a manner that one saw how the hairs issued from the flesh, thick in one place, scanty and scarce in another. The nose with its beautiful nostrils, rosy and tender, seemed to be alive. The open mouth and its corners, united by the red of the lips and the flesh tints of the face, appeared to be not painted but real flesh. By intently observing the *pit* of the throat the spectator would be convinced that he could see the pulse beating in it, and could but feel that this was a picture to make even the boldest artist tremble and lose courage. Leonardo made use, also, of this device: Mona Lisa being very beautiful, he employed people to play and sing, and continually jested while working at the picture in order to keep the lady merry and thus banish that air of melancholy which is so often seen in painted portraits. In this picture of Leonardo's there was a smile of such charm that it seemed more divine than human and was esteemed a miracle since it was nothing less than alive.

The statement that, in spite of Leonardo's four years' work at the portrait it never was finished, may be exaggerated and yet not quite void of foundation; for Leonardo was painting the picture at the same time that he was working on his famous cartoon for the great battle-piece. He took it with him when he went to Milan in 1506. The numerous Milanese copies which exist attest that the picture had been exhibited for some time in the studio of the artist at Milan and must already have been considered the supreme model and standard of the art of portraiture. Upon it more than upon any of his other works were formed the stylistic principles of scholars and also, unfortunately, the efforts of Milanese imitators after a sort of psychological mannerism, which, devoid of independence and depth of psychical analysis, degenerated to the level of a vacuous mask.

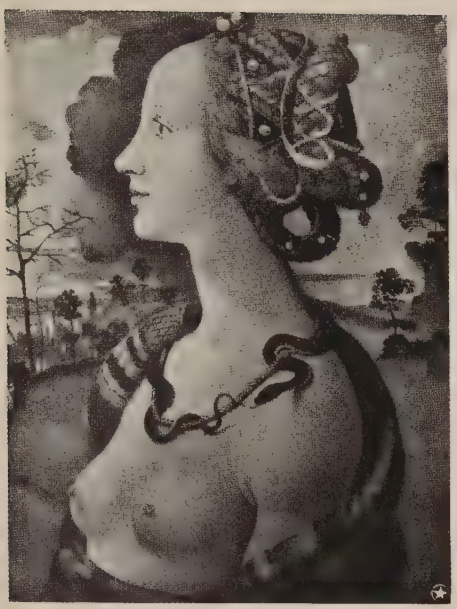
Its charm and ineffable fascination have always been a riddle to artists and historians of art. Somehow one feels that this rare work of art contains more than a mere outward likeness, a mere delineation of the semblance and the material stuff; the enigmatic smile, in particular, has evoked rather far-fetched attempts at explanation. Conjectures as to Leonardo's personal relations to the model, his being in love with her and so forth, have been circulated by different authors without the slightest particle of evidence but that afforded by their own imagination. The picture viewed historically in connection with a number of previous Florentine women's portraits discloses nothing unique either in the smile or in the psychological treatment as a whole. They are explained as a

natural evolution and enhancement of certain features of style already existing in Florentine portraiture. The picture, then, becomes the expression of an ideal of beauty which belonged to the time as well as to the artist, although, naturally, that ideal was enormously refined when it served to express Leonardo's rich poetic soul.

Among the works of earlier Florentine portrait painters who still painted in Leonardo's time those of Botticelli and Piero di Cosimo should be given first place. Of the former, there is no fully authenticated woman's portrait extant, but of the latter we have a couple of pictures possessing a very special interest in connection with Leonardo's *Mona Lisa.*

One of them, a juvenile work now in the Chantilly Museum, represents Simonetta Vespucci, the mistress of Giuliano dei Medici, who, in 1476, was carried off by death in her twenty-third year. The picture was, no doubt, painted several years after the death of the sitter, for at that time Piero was a half-grown lad. Being therefore an ideal picture of an adored young beauty it naturally is an ideal example of Florentine portraiture at the end of the fifteenth century. The pose of the head is strictly in profile but the nude bosom is turned a little to the front so that its slender, delicate form is fully shown. The picture is cut off at the elbow the hands being left out. The dressing of the hair, in long, coiled plaits bound with strings of pearl, is a masterpiece of decorative art, which, in conjunction with the coiling snake (the symbol of wisdom) round the neck, and the mottled shawl over the shoulder, gives the picture a weirdly fantastic and romantic air. The brightly illuminated face, modelled entirely without shadows, stands out sharply against a dark blue cloud in the otherwise clear sky. The artist has aimed at bringing out piquant contrasts and thereby attaining an effect which fascinates by a somewhat agitated vivacity rather than by any monumental bearing. The bright and open expression—so unlike the yearning rapture in Botticelli's feminine models—is due in great measure to the youthful elasticity of the figure and the upward look of the eye as well as to the slight rippling of the lips into something like a smile.

A later portrait of a woman (in the Galleria Nazionale of Rome) dates from about 1500. Here the model is represented with the attributes of St. Mary Magdalene, and Piero, discarding the typical quat-



Piero di Cosimo, Idealized Portrait
Chantilly Museum

Piero di Cosimo, Portrait of a Lady Reading
Galleria Nazionale, Rome

Desiderio, Bust of a Young Lady
Kaiser-Friedrich Museum, Berlin

Mino da Fiesole, Bust of a Young Lady
Rothschild Coll., Paris

trocento pose, has chosen a compositional form which, in its main features, is that of the High Renaissance. The figure, placed in a window opening, is cut off a little below the waist but both hands are included. Against the dark background, uniform in colour, the plain dress glows with deep greens, reds, and yellows. The modelling of the face and slender hands is extremely subtle, executed in soft half-tones which nowhere become deep shadows. Round the pale, delicate face with its lowered eyelids the chestnut hair falls thick and lustrous, gathered into plaits tied with strings of pearl at the back, then brought round to the front in long wavy locks falling down over the shoulders and throat. A singularly tranquil, restful spirit permeates the composition; the beautiful penitent is entirely absorbed in meditation over her little prayer-book. In every way the artist has striven to subdue and restrain the decorative effect; he has left out such elements of unrest, of tension and capricious vivacity as we saw in the earlier portrait. In point of composition this portrait is already at the same stage of development as the *Mona Lisa*. The clearly defined spatial composition is even more accentuated than in Leonardo's work, though the pictorial problems which the two artists have set themselves are quite different; Piero di Cosimo has chosen the mild sunlight falling in from one side, whereas Leonardo makes his figure come out from a light background, the modelling being in diffused half-lights. He is more guarded even than Piero di Cosimo in avoiding accentuated shadows and contrasts. *Mona Lisa* is bathed in an unreal, vibrating, fairy light.[1]

These two portraits of Piero di Cosimo's give us a notion of the course of development in Florentine portrait painting during the last two decades of the fifteenth century,—the period during which Leonardo was away in Milan; but neither of them—at all events not the later picture—gave any typical expression to the feminine ideal of beauty which towards the close of the fifteenth century predominated in Florence. We find that ideal better wrought out in contemporary sculptures, above all in Desiderio's and Mino da

1 A somewhat later portrait by Piero di Cosimo, *The Lady with the Rabbit*, in the Jarves Collection in New Haven shows plainly that the composition of Mona Lisa became a model even to Piero di Cosimo. His subsequent portraits reveal the general trend of evolution in Florentine portrait painting at the end of the fifteenth and the beginning of the sixteenth century.

Fiesole's busts and Madonnas. These Florentine busts of women in marble or painted stucco, which during the sixties, seventies, and eighties of the fifteenth century were executed in quantities to adorn mantelpieces or door cornices in the new and stately palaces and country houses of the rich, exhibit a uniform type which is characteristic of the period,—a type marked by the thin, slender form, the narrow shoulders, the long neck, the backward brushed hair, the high eyebrows, and the smiling mouth. They fascinate us by their fresh, spontaneous animation which at times assumes a touch of dreamy melancholy and at others is brightened by an expression of roguish gaiety. The natural simplicity of the representation, the freedom from all artifices, have been carried so far that they have almost the look of an affected refinement,—at any rate, no later artist has ever succeeded in really imitating it. These sculptors of the quattrocento were above all masters at suggesting. With a caressing hand and subtle graduations they succeeded in expressing the living beauty and individual grace of their young models. No one can doubt that these busts of women are true to life. In spite of their typical character, which is that of the particular period, they are each and all so individually alive that, when placed in their natural surroundings, they almost seem to find a voice and speak to us in the aspirated accents of the Tuscan dialect of the gay life in Florentine palaces and villas of the latter half of the fifteenth century.

In the later busts of women by Verrocchio and his pupils,—dating from the close of the century,—a more serious and reflective note is struck. The artist seems bent on giving something more than a bright smile and spirited bearing. It is as though the women of Florence had gradually matured,—at any rate in art.

Verrocchio's lady with the nosegay of primroses in the Museo Nazionale at Florence is in several respects an extremely remarkable work. (It is probably from the latter half of the seventies.) The composition has been developed to a pitch of monumentality hitherto unknown. The bust is cut some distance below the waist, and the arms with both hands have been introduced in their entirety. The bosom is high and broad, the neck powerful, the bearing exhibits a queenly dignity. The big expressive hands, which play so important a rôle in the characterization of this intelligent woman, have even impelled a number of critics to conjectures as to Leonardo's possible

co-operation with Verrocchio in this work. In any case, the bust assumes a unique place in Florentine quattrocento sculpture,—as far as we know there exists no other with a similar composition,—and, particularly in the masterly characterization of the hands, it constitutes a preparation for Mona Lisa's portrait. In his other bust of a woman,—the so-called "Medea Colleoni" in the collection of Gustave Dreyfus in Paris,—Verrocchio by no means attains the same monumental dignity and noble psychological characterization. The composition is the usual one and its distinction from the works of his predecessors consists only in a more tranquil tone and a certain massive breadth of form. Nor do we find in this quite ordinary lady a vestige of the sensitive and gay temperament or a touch of the dreamy expression which captivates us in Desiderio's young Florentines.

On the other hand, in one of his earlier works,—the bronze statue of the youthful David, which was executed while Leonardo was still working in his studio,—Verrocchio has evoked something of the bright smile, joyous as a spring morning, of the Florentine Early Renaissance. But the tone is not at all naïve or unsophisticated; the smile borders on smirking slyness, and the whole countenance exhibits something of the suppleness and alert watchfulness of the fox. We seem to find here in germ something of the complex and enigmatic life which we find fully expressed in *Mona Lisa.* This does not oblige us, however, to assume, as some critics have done, a determining influence from the young Leonardo. It is sufficient to note that, just at the period when Leonardo was working with Verrocchio, there appears in the latter's figures,—the *David,* the *Boy with the Dolphin,* the *Lady with the Primroses,*—something of that psychological expression which was to be developed into full maturity in Leonardo's human figures, and to find its richest and most triumphant expression in this portrait of Mona Lisa.

* * * *

As has been shown, some knowledge of the works of art which have been cursorily reviewed (and of other similar ones) renders the portrait of Mona Lisa less surprising than it might otherwise appear. It marks the ideal enhancement, the consummation of the

stylistic and compositional endeavours which had begun to work their way to the fore in later quattrocento art.

Mona Lisa is seated in an arm-chair, as if taking the air upon a high terrace in an open loggia,—or perhaps, rather, in an upper loggietta of a country villa,—closed by a parapet behind the figure, the columns of which are indicated at the sides of the picture. This loggia, or the villa, is evidently set upon a hill, for it commands a magnificent prospect of valley and mountain scenery as looked down upon from above. The lady is, thus, in outdoor light; but she turns from the landscape as if calmly listening to the conversation of an invisible companion or to the music which the painter has arranged to relieve the tedium of a long sitting.

She is at least not entirely alone and aloof from human intercourse. The body, ending with the lap, is in nearly half-profile to the left, but the face almost fronts us and the eyes look straight out at something or somebody. If we or her invisible interlocutor have aught to say she will listen and attend; but she will not answer on the spur of the moment nor respond to any mood but that of entire tranquillity. It is a pose of perfect peace yet of an entirely wakeful and observant intelligence.

The architectural setting and the landscape,—important though they be,—are entirely subordinate in the ensemble. The large, noble figure, the wonderful sensitive hands, the inimitable face with its spiritual values, unite to form an image dominating completely every surrounding circumstance and condition. The dark green habit is severely simple,—perhaps it is a mourning costume as seems especially indicated by the transparent black veil,—but it functions for texture and in the play of light and tone is worked out with the most affectionate care. We may observe in its treatment the subtle change from the clear-cut outline on the right, so important in establishing the static pattern, through the rich, rippling folds on the arms, to the entrancingly complex contours on the left of the figure, which at once guide the eye into the maze of background effects. In the relation of what is an essentially plastic portrait to its landscape setting Leonardo here completes the task begun by earlier masters. He marries sculpture to painting in a final and indissoluble union.

The colour—darkened with time and chemical change, and never, of course, colour such as Titian or Velasquez knew but rather a won-

Leonardo, Portrait of Mona Lisa del Giocondo

Louvre

derful, sombre, pigmental enamelling—is still of thrilling effect in surface and general tone. The flesh-tones, in their illumination and enveloping atmosphere, their tender, quivering, fluid handling, in their warmth, elasticity, and subtle surface changes, with the shimmer over the eyebrows and modelling, the faint rosy touches in the nostrils which so delighted Vasari, all these are of incomparable mastery in their kind and are not concealed by the dust and varnish of the centuries.

As regards this indescribable general quality in colour and tone, with the elemental effect in the background, we may again consult the master's own words in the "Trattato," as where he says: "When you wish to paint a portrait, paint it in bad weather, at the fall of the evening, placing the sitter with his back towards one of the walls of the courtyard. At the fall of the evening notice the faces of men and women passing in the street when the weather is dull—what delicacy and softness they display." Or when he warns the artist against "the one-sided light through a window, or the sunshine which produces composite shadows full of reflected lights." In his eyes the ideal illumination is a subdued and diffused light which does not exert by its reflections any disturbing influence on the modelling of the object, or alter its colours by too great intensity. It is something like the northern twilight, or as Leonardo himself says: "like the light from a clouded sky." In fact, throughout his career, Leonardo was moved more and more towards full chiaroscuro. His statement that: "chiaroscuro in conjunction with foreshortening constitutes the highest glory of painting," proves this. But, unlike the northern painters, Leonardo never places his figures in closed interiors, he never strives after the melancholy minor key of twilight in the dwellings of the people. For he is a Southerner, and receives his impressions chiefly from outside the four walls of his studio. It is in the fine gradations of tone of the open atmosphere that he seeks the chief mystery of painting. And with all the progress in technical means, no subsequent portraiture has quite equalled this in plastic finality.

We do not at first think of this theory of the visually plastic modelling of objects in direct illumination as having any practical illustration in Leonardo's work. In our modern acceptation of the term Leonardo is not a landscape painter and we are hardly likely

to admit much more than a fantastic imagination as giving foundation to the strange background of the *Mona Lisa*. Whether any real effects of Apennine or Alpine scenery may underlie this vision or whether we are to accept a recent theory of Chinese influence,[1] we are, in any case, confronted with no literal translation of natural phenomena, although the scene is directly related to the portrait by the elevation of its horizon approximately to the level of the eyes in a fashion almost unknown to earlier art in which the head is usually silhouetted against the sky.

The landscape is one of rocky desolation, ice-bound in its distant and inaccessible peaks, and seems much like an elaboration of the decorative or symbolic mountains of mediæval pictures and illuminations. It is not a country which human beings could love and settle in; all its forms are frigid and its very air is cold. The only sign of human life is the bridge crossing a tortuous stream, with what seems a winding road,—or is it a bit of glacial ravine?—upon the left. Evidently the pictorial likeness is carried far but still it is possible to recognize a substratum of nature underneath, and we have scarcely need of the Chinese theory. The poetic interpretation approaches that of the Chinese simply because it is based on nature in its ultimate inspiration. We are moved to add, moreover, that the seeming Chinese affinity in landscape form is paralleled, as we shall see, in figure drawing,—in the studies for the Battle of Anghiari,—a fact which proves a little more than the theory can quite carry. The reasons why Leonardo has had so little recognition as a landscape painter in his own right are, first, owing to the narrow *notion* of landscape painting which confines it to an independent sterility of modern romanticism or naturalism; second, that almost all the classic work of modern times has a classical basis in Italian humanism, starting mainly from Mantegna and Giorgione; and, finally, that the essentially plastic type of landscape interpretation to which Leonardo belongs, and which comes straight from Giotto and Masaccio as a logical development of landscape in strict subordination to historic figure composition, has never been completely studied or analyzed. Giotto, Masaccio, and Leonardo, are, in fact, in spite of some mediæval adumbration and some want of technical equipment, nearer to nature as serving monumental emotional ends in its most

[1] *Cf.* Oscar Münsterberg in *Orientalisches Archiv*, 1910.

elemental values, than the Venetians or than any Northern European masters except Rembrandt.

Let us now return to the figure of *Mona Lisa.*

It may well be that the dark dress was selected owing to the fact stated by Leonardo that "black garments cause the flesh parts of the human figure to emerge in stronger relief than light garments." But in the face of *Mona Lisa* there are no accentuated transitions from light to shade, no sharply defined contours; its form is brought forth from out of the subdued light with an art which does not leave us in uncertainty as to the smallest detail. "Modelling," as Leonardo again writes, "is the principal thing, the soul of painting."

It has been observed that the detailed modelling has been carried rather far, and that, in consequence, the general effect is perhaps less reposeful than if the modelling had been kept in broad planes. To realize this we should compare *Mona Lisa* with, for instance, Raphael's *Portrait of Baldassare Castiglione,* or with Titian's portrait of the *Man with the Glove,* both of which hang near the *Mona Lisa* in the "Salon Carré" of the Louvre. Both these famous pictures exhibit a breadth of treatment and a grandeur of line which are not found in the Mona Lisa; but in neither of them do we find the shifting richness of mood, the radiant spiritual life, which are the attractions of the pale woman. Whereas the two men pictures impress the beholder, even at a distance, as monumental compositions, we must approach close to *Mona Lisa* to do full justice to its artistic merits; its beauty of detail and its pictorial *sfumato* are not intended for a large museum but for the intimacy of a private cabinet. Moreover it may be questioned whether this comparative lack of formal breadth and uniformity which to a certain extent link *Mona Lisa* with the portraits of the preceding epoch is not due to the artist's conscious endeavour rather than to his inability to express himself in more monumental form. Leonardo had at this time already shown, both in the *Last Supper* and in the *St. Anne,* what he was capable of in the monumental style. But here he sets himself to a work in which an infinity of subtle shiftings and fine modulations in the formal expression are the means he has deliberately chosen as the best to present the evanescent variability in the character of his model.

Many are those who have asked what this complex, shifting,

unseizable life,—which one feels in the eyes, which plays like a smile over the lips,—really is. The answers have varied greatly, the different interpreters have read their personal feelings into the beautiful smile. To us it seems as if this smile were neither that of joy nor that of irony, nor yet the smile of the charmer or that of one in love, but rather the mantling disguise for a deeper-lying feeling which must not be betrayed. If it is true that *Mona Lisa* is wearing mourning, it becomes easy to understand why her smile appears a trifle artificial, her joy a little enigmatic. This mood was then called forth by the artist's entertaining stories and by the music and jokes of his players and jesters. It was transient, shifting. It did not express the real personality of the soulful woman.

If one desired to ponder over the psychological problem of this portrait the solution is only to be found through most thorough study of the artist's own life. The enigma which dwelt in the depths of Leonardo's own soul is also to be found in his works and particularly in this portrait.

In the endless copies of the Louvre picture *Mona Lisa* inevitably loses her charm. Many are mere caricatures, some even representing the figure in the nude and with a grinning smile; of these one is in the Hermitage, following the drawing at Chantilly[1] by some pupil of Leonardo's. In other cases the background is filled with flowers and plants which quite mar the original intention as to the modelling of the head out of a light airy background.[2] One of the best, though not most faithful, of the copies is to be found at Madrid, executed, according to Frizzoni, by the same artist who painted the *Ascension of Christ* ascribed to Leonardo in the Kaiser-Friedrich Museum in Berlin. In this rendition the background landscape has been replaced by a flat, dark ground, the face is somewhat elongated and yet the presentment retains not a little of the original expression. The copy belonging to the Vernon family of Newport, Rhode Island, is

[1] There are several other repetitions of the same composition executed at different epochs during the sixteenth century, as shown in the article by Herbert Cook: "A newly discovered Leonardo," in the *Burlington Magazine*, May, 1909. The best is the cartoon in the collection of Earl Spencer; others are in the possession of Mr. William Kaupe of Pallanza, Conte Primoli of Rome, M. Chambrières-Arles of Paris, etc.

[2] This is the "Flora" version, famous since the discussion on the Berlin bust; the best specimen of it belongs to Sir Kenneth Muir Mackenzie in London.

Contemporary Copy after Leonardo's Mona Lisa

Prado, Madrid

Raphael, Drawing for the Portrait of Maddalena Doni

Louvre

Follower of Leonardo, Study after Mona Lisa

Chantilly Museum

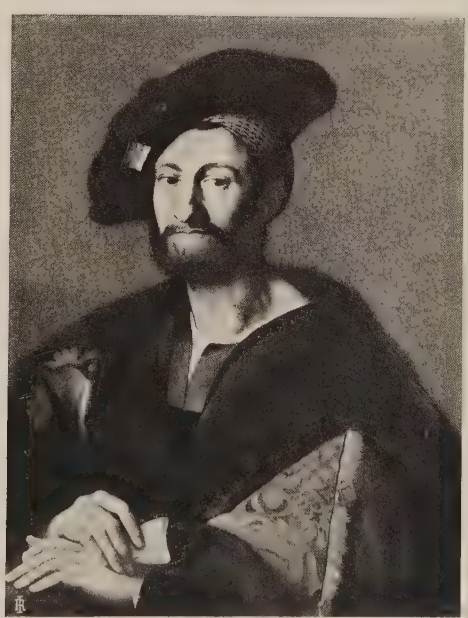
Follower of Leonardo, Free Copy of Mona Lisa

Hermitage, St. Petersburg

Raphael, Baldassare Castiglione
Louvre

Andrea Solario, Charles d'Amboise
Louvre

Tizian, Francois I
Louvre



Alessandro Allori, Giuliano de Medici
Uffizi

worthy of mention, as likewise those in the possession of Lord Wemyss, Earl Brownlow, etc.

* * * *

Far more interesting than any direct imitation or copy, however, is the pen and bistre drawing which Raphael made as a study in composition for the portrait of Maddalena Doni in the Palazzo Pitti. The drawing, which shows Raphael's broad Florentine manner, is evidently from memory. Raphael was struck by the arrangement of the figure as is shown by his rendition in which the model is seated in a three-quarters pose on a terrace opening upon an unobstructed landscape. The terrace balustrade is raised up to the shoulder and the head is framed in by two columns,—which were only indicated by Leonardo. The mountain landscape is replaced by a plateau with quiet undulating hills and the draperies are more broadly treated, while the whole composition has been given more uniformity than we find in Leonardo's picture. The portrait itself, however, is inferior to the sketch.

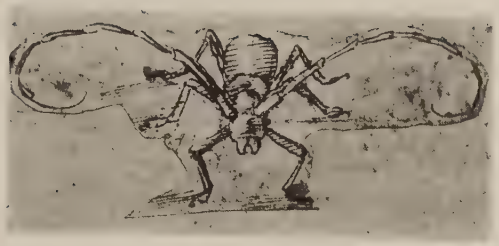
The formal idea of Leonardo's picture can be traced far beyond the circle of the actual imitations. The "archaic smile" continues to appear in the works of both Florentine and Milanese artists, although without the slightest psychological affinity to Leonardo's original. It became an outward decoration in otherwise insipid *Madonnas* and *Saints* or in vacuous aristocratic beauties in whom the artists wished to give a suggestion of soul and inward beauty. Among the Florentines who made use of it, we may mention Piero di Cosimo again,—who employed it in his *Perseus* pictures,—Bugiardini, Pontormo, and Andrea del Sarto. In Andrea's youthful work, the *Madonna* in the Galleria Nazionale at Rome, the smile is more pronounced in the child than in the mother. With the Milanese artists this motive became especially exaggerated,—as may be seen in works of Cesare da Sesto and Giovan Pedrino,—or lapsed into insipidity, as in Bernardino Luini's anæmic beauties. The only one who independently developed and imparted real emotional content to it was Correggio. But its essential spirit was changed. The happy, sensuous gayety of Correggio's men and gods is entirely alien to Leonardo's art.

XII

STUDIES OF PLANTS AND ANIMALS. THE BATTLE OF THE STANDARD

In the present age, being specialists by compulsion, we find it hard to comprehend the idea of an "universal genius" in art or in anything else. But with Leonardo,—and he only reflects the philosophic tone of his age,—the principle that there is only one knowledge and only one art, and that it is the purpose of a leader of men to envisage his every task or problem in its relations with all else, was still thought to be within the range of practical endeavour. As a young man Leonardo was essentially the local craftsman, but from the very first his spiritual reach exceeded the grasp of the immediate matter in hand. With maturity art became with him more and more encyclopedic, not only within its own range but also in its larger relations to life and thought. The hard and fast distinction which we are likely to draw today between truth and beauty, between science and art, simply did not exist for Leonardo. With the perhaps naïve, but still sublime faith in human character which we find in a Socrates or a Confucius, he not only assumed that knowing and doing meant the same thing for the artist, but that the principle could be applied in the actual conditions of the art life around him. That, for example, the painter's interest should be of universal scope is a frequent thesis of the "Trattato." We must quote a passage or two as an introduction to our studies of the wonderful drawings from nature. It is with Leonardo the naturalist that we are to be concerned for the moment. This aspect of his work has been sometimes regarded as a failing, but at the least it should be of interest as offering an example of a reconcilement of an intolerable schism of the human spirit.

That painter is not to be commended, who does only one thing well, such as a nude figure, a head, costumes, animals, landscapes, or other such specialties. There is no man of so dull a wit that he cannot learn one thing at which he works incessantly,—he is bound to end by doing it well.



Leonardo, Drawing of a Beetle
Turin

Leonardo, Studies of Flowers
Academy, Venice

That man is not universal in his scope who has not a humour for everything that pertains to painting.

If, for instance, an artist is not interested in landscape, he imagines that landscape-painting only requires short and simple study. Thus our Botticelli said that such studies were bootless; for, if one only threw a sponge with various colours at a wall, it would leave a stain on the wall in which one could see beautiful landscapes. It is true that in a stain thus produced one can see various fancies,—that is, if one has a mind to look for them,—such as human heads, manifold animals, battle scenes, rocks, seas, clouds, forests, and so forth. It is with this just as in a chime of bells into which you can read any words you wish. But if such stains suggest to you ideas, they can at all events not teach you to complete any separate part. A painter with the views alluded to above will make very bad landscapes.

Seeing that painting can embrace everything that Nature produces and, moreover, those things that are produced by human labour, nay,—anything at all that may be perceived with the eyes,—I hold the man who makes only one figure well to be a very sorry painter. Do you not see how many different postures and movements human beings can compass? How many different species of animals exist? How many trees, plants, and flowers? What a manifold variety of hilly and flat regions, springs, rivers, strands, public and private buildings and tools suitable for man's use? And how many different costumes, ornaments, and arts there are? All these things must be depicted with equal facility by anyone who will call himself a good painter!

By their fruits ye shall know them. Leonardo's every work illustrates and vindicates these principles. He, more than his fellow-artists, conceived of art as having universal ends, as balancing the objective and the subjective factors in vision, as uniting representative and technical expression, as capable of transfiguring the whole phenomenal world with an exactitude of beauty.

When we reflect how one-sidedly the other great Renaissance artists—even Raphael and Michelangelo—restricted their interest to the human figure as an element of art expression; how their endeavours were directed towards the movement, posture, abstract mass and space in the human figure, and how rarely they interpreted the beauty of phenomena in the animal or vegetable world for itself, we may realize Leonardo's versatility, and his sensitiveness to impressions from the lower natural kingdoms. If in this respect the scientist lent a hand to the artist, it was never with a narrowly empiric or informatory aim, but always as searching out an ideal, permanent, and universal image.

In his drawings of flowers he vies in affectionate detail with the greatest northern masters. He penetrates the secret of trees and flowers; he depicts organic growth, the articulation of trunk and branches, leaves and stalk; and we even feel the flow of sap, the

actual life and growth of plants, better in his drawings than in our own observation of nature. Fidelity to fact could hardly be carried further, but this is not the paramount feature of the art; it is rather the draughtsman's power to imbue the whole conception with life and being, which makes the plant something like an animal, possessing feeling and a capacity for expression.

Leonardo's extraordinary insight for the life of vegetation was particularly remarked upon by Vasari. In his description of the cartoon representing Adam and Eve in Paradise, now, alas, lost to us, he notes the flowers and fruit "which a divine intellect could not have made more perfect," and the leaves and branches of the trees, which were rendered with such care that "the brain reels at the mere thought how a man could have such patience." One is led involuntarily to think of Leonardo's own characterization of the art of painting as "una sottile inventione," which "with subtle reflection and philosophy contemplates characteristic qualities in all forms." . . . "Painting is truly a science and a legitimate daughter of Nature, for she is born of Nature. But, if we would be more exact we may call her Nature's grandchild; for all visible things are born of Nature, and these have then given life to painting. We can, therefore, justly call her Nature's grandchild and a kinswoman of God."

In another passage Vasari gives us the following characteristic illustration of Leonardo's interest in the lower kingdoms of Nature and of his all-embracing scientific curiosity.

> He was so pleasing in conversation that he won the hearts of all men. And, although he possessed, so to speak, nothing and worked little, he always kept servants and horses; in the latter he took much delight and treated them, as he did all animals, with the greatest love and patience. This he often showed, when he passed places in which captive birds were offered for sale; he took them with his own hand out of their cages, having paid the price the seller demanded, and restored to them the liberty they had lost. For which reason he was abundantly favoured by Nature; on whatever matter he bent his thoughts, mind, and soul, he displayed in the execution thereof such divine power that no one ever equalled him in swiftness, dash, excellence, beauty, and grace. . . .

In several of his reflections on the characteristics and habits of various plants and animals he also indicates how he regards all phenomena as individual aspects of a sort of general intelligence pervading nature. The following lines as to the fructification of plants will serve to exemplify this point of view:

Leonardo, Studies of Horses and Riders

Royal Library, Windsor

Every branch and every fruit appears immediately above a leafy shoot which for them takes the place of mother, as it supplies to them the rain-water or the moisture of the dew which falls by night and often protects them from the overpowering heat of the sun's rays.

Leonardo drew animals with the same trenchant characterization as that shown in his plants. Both in verbal descriptions and in drawings (in his *Bestiarius* and his sketch-books) he ranges from dragonflies, bats, and birds, to cats, lions, and horses. Most of these studies were made to illustrate some wise ordinance of Nature, and thus recall the artist's many fables and allegories. We may instance his detailed studies of the flight of birds, which were essays towards the invention of the flying-machine. His descriptions of animals and their habits often contain a moral, an application to mankind, intended to show how analogous laws of nature, instincts, and calculations run through the lives of different beings:

It is told of the bear that when he comes to the dwellings of the bees in order to rob them of their honey, the bees begin to sting him; he then leaves the honey and rushes at the bees in order to avenge himself, but, as he tries to wreak his vengeance on them all at once, he gets hold of none, his wrath turns to fury, he throws himself down on the ground and lashes out with his paws, thus only amusing those on whom he was trying to take vengeance.

Of the eagle it is related that he is never so hungry but that he leaves a little of his booty to the birds who swarm around him. As they are unable to get food themselves it is necessary for them to follow the eagle; it is thus that they obtain their food. . . .

The mole has very small eyes and dwells continually below ground. He lives as long as he remains concealed, but if he comes into the light he soon dies, for he becomes revealed to all. Thus it is with a lie.

Masses of similar reflections could be cited; they fill quite a little volume among Leonardo's manuscripts (Manuscrit A. de l'Institut), but they are more interesting as literary curiosities than for any light they cast on his artistic activity. On the other hand, in the "Treatise on Painting," there are various passages which indicate that Leonardo had also studied in detail the plastic anatomy of animals, their structure and movements. One of his general observations is that in several cases they are better equipped than man.

No animal, however, appears to have enlisted his interest so much as the horse. He studied it both practically and theoretically quite as seriously as the human figure; he, indeed, planned a treatise on the anatomy of the horse, and depicted it throughout his career with

a persistency and method to which the history of art affords no parallel. He, in fact, delineated horses with the same extraordinary analysis of character that he devoted to human beings.

* * * *

We have already discussed and reproduced a number of special studies executed in connection with the equestrian statues, the artistic significance of which depended above all on the action and modelling of the horse. In this place should be mentioned certain other studies in which Leonardo concentrated his attention on the horse's head, and rendered it with an almost speaking expression. A finely representative drawing of this kind is a comparatively early sheet at Windsor containing studies of the heads of horses, panting or savagely biting and kicking. The fume and fret, the mad fury of these heads, are notes of a dramatic intention in sympathy with human action rather than of purely naturalistic analysis. The horses, although marvellously true to life, seem almost human and they are accompanied by other motives of animal and human passion,—a roaring lion and a shrieking man,—treated for accent and rhythm rather than for objective ends. We incline to think the drawing a study for the background of the *Adoration,* in which are several passages of similar import,—battling horsemen or impetuous mounted knights, passages which, with the drawing, prove that Leonardo's interest in the problem of equestrian composition began before his summons to Milan and that the motive of violent action in scenes of battle was also in his mind. It was, indeed, in such motives, which permitted the utmost tension of form for a dramatic end, that the master was soon to astound his Florentine clientele by surpassing anything Florence had ever seen. Before giving full rein to the naturalist's more purely theoretical or experimental ambition, Leonardo was to undertake still another vast work of dramatic art, in direct competition with his only possible rival and in a field as yet almost unexplored. There was here no question of religious symbolism or of individual portraiture, the new undertaking concerned the State and its history.

As regards the commission for the *Battle of Anghiari,* we may once again turn to the indispensable Vasari:

Fighting Riders, from the Background of the Adoration of the Magi

Leonardo, Study of Charging Riders

Royal Library, Windsor

Owing to the excellence of the works of this divinely favoured artist, his reputation had increased in such degree that all lovers of art, nay,—the whole city of Florence,—desired that he should leave them some memorial. People spoke everywhere of entrusting to him the execution of some great and notable work whereby the commonwealth might be honoured and adorned by the great genius, judgment, and charm which were displayed in Leonardo's creations. Eventually an agreement was concluded between the Gonfalonieri and the chief citizens. The Great Council Chamber having been newly built, designed according to the judgment and counsel of Giuliano da San Gallo; Simone Pollajuolo, called il Cronaca, Michelangelo Buonarotti, and Baccio d'Angolo (as will be related more at length elsewhere), and having been finished in great haste, it was ordained by public decree that Leonardo should be given some beautiful work to paint. Thus the said hall was assigned to him by Pietro Soderini, who was Gonfaloniere di Giustitia. Leonardo undertook the work and began a cartoon in the Sala del Papa,—a hall in Santa Maria Novella,—representing the story of Niccolo Piccinino, a captain of Duke Filippo of Milan, wherein he designed a group of horsemen fighting for a standard. This work was considered to be an extraordinary masterpiece on account of the marvellous fantasies that he used in composing the battle scene. Fury, wrath, and lust of vengeance are expressed both in the men and in the horses, two of which, with the fore legs locked together, are fighting no less fiercely than their riders in struggling for the standard. The latter has been gripped by a soldier who spurs his horse to flight, at the same time turning his body backwards in order with the weight of his shoulders to wrest the staff of the standard out of the hands of the four others, two of whom are defending it, each with one hand, and swinging his sword with the other in order to sever the staff, while an old warrior in a red cap, crying out, clutches the staff in one hand and lifting his scimitar in the other, furiously levels a blow which is meant to cut off the hands of his opponents; the latter, straining themselves to the utmost, and gnashing their teeth, are striving fiercely to defend their standard. Between the feet of the horses are seen two figures in foreshortening, fighting together; the one on the ground has over him a soldier who raises his arm to its full extent in order with greater force to plunge a dagger into his opponent's throat and despatch him; but the latter lays about him with arms and legs, struggling frantically to escape death. It is not possible to describe with what manifold variations Leonardo drew the garments of the soldiers as likewise their helm-crests and other ornaments, still less the incredible mastery which he displayed in the forms and lineaments of the horses, which Leonardo has rendered better than any other master in the strength of their muscles and beauty of shape. It is related that, in order to draw this cartoon, he made a most ingenious stage, so contrived that it was raised by bringing it together and lowered on its expansion. Also that having conceived the desire to paint on the wall in oils, he made a coarse mixture to act as a binder on the wall, but that, while he was yet painting in the said hall, the paint began to flake off to such an extent that he gave up the whole picture for lost.

Leonardo had a proud disposition and was high-spirited and generous in all his dealings. It is related that once when he went to the bank to draw his monthly stipend from Pietro Soderini, the cashier wanted to pay him with some paper-bags of small coin, but he disdainfully refused them, saying: "I do not paint for coppers." Accusations began to be made of his having cheated Pietro Soderini of money and there were murmurings against him. Leonardo then arranged with the aid of his friends to get together the money and went to repay it, but Pietro refused to take it.

Leonardo began the work at the great cartoon for the battle-piece in the autumn of 1503. On the 24th of October he was handed the keys of the "Sala del Papa" in Santa Maria Novella, the hall which he used as a studio. The official decree on the strength of which the contract was drawn up between the Signory and the artist was, however, not issued before the 4th of May, 1504. It stipulated that Leonardo was to receive a monthly salary of fifteen gold florins, reckoning from April 20 of the same year; but if the cartoon were not finished by February, 1505, the artist was himself to defray all further expenses. Several accounts for working materials which have been preserved show that the work went forward quite briskly. On the last day of February, 1505, the scaffolding for the painting was, sure enough, erected in the "Sala del Gran Consilio"; the cartoon had been finished in due time and the artist now addressed himself to the execution in colour. Then come successive payments for plaster, linseed oil, paints and so forth, and for assistants, among whom are mentioned Rafaello d'Antonio, Ferrando Spagnuoli, and Tommaso, "who grinds the colours." The work advanced rapidly enough for a time and with a comparatively large working staff; but in a few months the whole machinery seems to have come to a standstill. The under-paint employed was unsuitable, the binding colours (oil-tempera?) began to run,—there was no means of checking the gradually proceeding deterioration. As to the cause of this, the Codice Magliabechiano supplies the following detailed information: "He took from Plinius the stucco on which he painted but did not understand it thoroughly. He tried it for the first time on a painting in the Sala del Papa, where he was working, and after he had placed the stucco on the wall and painted it, he kindled a large coal fire before it, and thus by the severe heat from the coals caused all moisture to evaporate from the material. Then he tried the same process in the Council Hall, and the fire, to be sure, sufficed to dry out the lower part of the wall, but higher it did not reach, and it was there that the material began to run."

In his "Life of Leonardo" (1529) Paolo Giovio writes as follows concerning the painting: "We also see in the Council Chamber of the Signory at Florence a battle, a victory over the *Pisans* (!) [i.e., the *Milanese*], an exceedingly fine work, which, however, was begun unluckily on a preparation characterized by an extreme in-

tractability which forces out the ground-paint mixed with oil; but the regret occasioned by this unlooked-for misfortune seems to invest the interrupted work with a higher degree of beauty."

* * * *

To judge by Vasari's account, the commission to paint the fresco for the newly built Council Chamber in the Palazzo della Signoria was literally thrust upon Leonardo by the force of public opinion at Florence. It was evidently considered unconsonant with good tradition and patriotic honour that the most illustrious artist in the city should not leave some work of enduring value in his native place. Further, the important circumstance accrued that Leonardo was to enter into rivalry with Michelangelo, that passionate young Titan who always seems to have harboured an instinctive dislike to the self-possessed and venerated patriarch among artists.

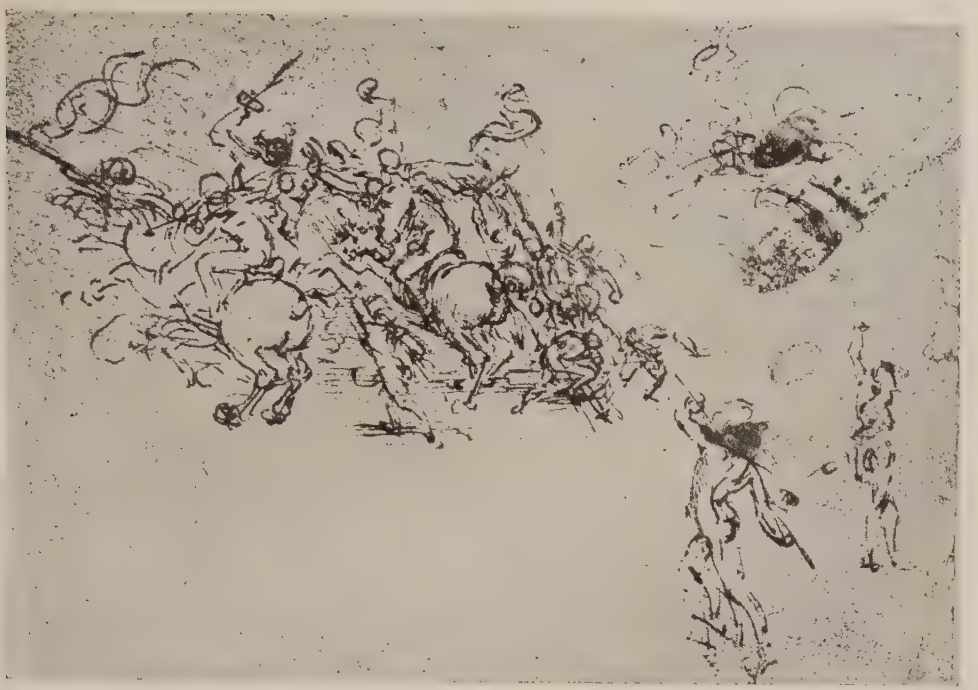
It was stipulated in the commission that the painting should represent a subject from the glorious history of Florence, but the artist probably was at liberty to determine what victory should be singled out for portrayal. He selected the battle of Anghiari, an episode in the war of the Florentines with the Milanese which had taken place more than a hundred years before, and, as a matter of fact, had never possessed any real political importance. He may have chosen the theme as particularly capable of imaginative recasting and elaboration. Certain spirited manuscript notes concerning the representation of war and battle-fields serve to give us an idea of the effect which the vanished fresco must once have produced. The principal group of the composition—"The Battle of the Standard"—has been transmitted to posterity by Rubens's drawing (in the Louvre), and by a number of other copies. Leonardo's own extant drawings for it are mere hasty sketches of scattered groups and figures, with detailed studies for some of the warriors' heads.

Leonardo seems to have planned a real geographical and historical delineation of the battle. He visited the place where it was fought out,—a little river valley between Arezzo and Borgo San Sepolcro,—and among his papers (in the Codice Atlantico) there is a description of the course of the battle, not, indeed, by Leonardo's own hand, but presumably compiled by some historian on the order of the Signory, to serve as a memorandum for the artist (*cf.* Richter,

Vol. I, No. 669).[1] It begins by telling how the Milanese general Niccolo Piccinino addresses the soldiers, encouraging them for the strife. He then mounts his horse and places himself at the head of the army which consists of forty squadrons of horsemen and two thousand foot-soldiers. On the other side the Patriarch of Aquileja, the general in command of the Florentine and papal soldiers, climbs a hill in order to survey the surrounding country, the hillocks, and the river valley. He catches sight of Piccinino who is coming with his army from Borgo San Sepolcro, and hurries back again down to the Florentine troops. After an encouraging address to the soldiers, he prays with clasped hands to God, and then hears St. Peter speaking to him out of a cloud. The battle commences by the Patriarch despatching a thousand horse to engage Piccinino. However, they do not succeed in preventing a detachment of the Milanese, under the command of Piccinino's son Francesco, from occupying the bridge over the river which they had been told off to defend. The battle then concentrates around this bridge, and proceeds with varying fortunes until the moment when Piccinino makes a final onslaught with his entire forces. The ranks of the Florentines begin to waver, but the Patriarch contrives to hold back the leader of the fugitives with powerful words, and at the same time orders some artillery placed on a hill in the vicinity. From this point fire is opened upon the Milanese infantry and such confusion arises that Piccinino is soon obliged to retire to Borgo San Sepolcro. The battle, which lasts until sundown, finally ends with the victory of the Florentines. The Patriarch then has the dead buried and a monument erected over them.

It is evident from Leonardo's sketches (Windsor, Venice, and British Museum) that he concentrated the action around the critical passage of the river, at the bridge which was occupied in turn by the combatants. The actual hand-to-hand fight, however, seems to have proceeded on the banks beside the bridge. It was here that the tumult of horsemen—the *Battle of the Standard*—was presented, probably flanked by soldiers who rushed forward to join in the crucial action and by smaller groups of combatants on foot and on horse. The whole scene was inserted in a spacious river landscape showing hills on

[1] The battle of Anghiari had already before this been represented by Florentine painters; it is the motive of one of the two cassone pictures by "Pseudo Pesellino" which were sold at the Butler sale in May, 1911, and again at the Grenfell sale in June, 1914.



Leonardo, Study for the Battle of the Standard
Academy, Venice

Cesare da Sesto(?), Drawing after Leonardo's Cartoon for the Battle of the Standard
Royal Library, Windsor

one side and with, possibly, some part of the Florentine camp in the middle distance.

One of the small pen-drawings in the Venetian Academy shows how the cavalry battle was placed in relation to the passage of the river and informs us as to the general situation. We see the horses rushing at one another, the horsemen with drawn swords lifted high, the enormous standard, riven in two, the foot-soldiers, trying with long lances to capture the cloth of the standard—all this woven into a vortex of movement, driven by the fury of battle. In the equestrian group we can, with some trouble, make out four horsemen, the same number which Leonardo retained in the painting, although their positions are not yet quite fixed and no fallen warriors are fighting under the horses' hoofs.

In another drawing in the same collection the equestrian group is somewhat less involved and forms a ring about an opening evidently intended to be painted dark, and possibly to leave room for fighting infantry. The horsemen, careering on with raised swords and waving ensigns, are, on the other hand, illuminated by flickering lights,—the whole group has the effect of a flaring and crackling bonfire. Below on the same sheet are lithe nudes with lances and clubs in a running fight. More energy, lightning-like agility, and tense strain have perhaps never been delineated with a few hasty strokes of the pen!

The actual equestrian battle seems also to be the motive of a large, but badly rubbed black-chalk drawing at Windsor. Several fighting horsemen, indistinctly defined, form a ring round an opening, and the half-shadowy character of the figures seems to emphasize the movement. Another black-chalk drawing in the same collection which, however, was not executed by Leonardo himself but possibly by Cesare da Sesto after a lost sketch of the master shows a troop of horsemen arranged in ordered ranks, galloping on with a leader at their head. From the foreground a soldier rides straight into the picture, so that the horse is seen in foreshortening from behind. This horseman has been copied by Raphael, among others, which indicates that the rider also occurred in Leonardo's final cartoon. We do not know what part this troop of horsemen played in the the big composition; but it is most natural to assume that it represented a detachment of Piccinino's cavalry charging on to the relief. Irrespective of whether the drawing corresponds to any part of the final

cartoon, it has great interest on account of the uncommonly monumental horses, which are certainly to be referred to drawings by Leonardo himself.

Moreover, there are in the collections at Vienna, the British Museum, and Windsor a number of smaller sheets containing scattered studies of fighting groups or of isolated galloping riders. The essential point in all these is the movement, the energy, illustrated in horse and rider, often sketched so slightly that one expects the image to fly away from the paper. These vivid suggestions seem, as has been pointed out by various authors, rather visible thoughts than actual drawings (*cf.* the red-chalk study of a rider in Windsor).

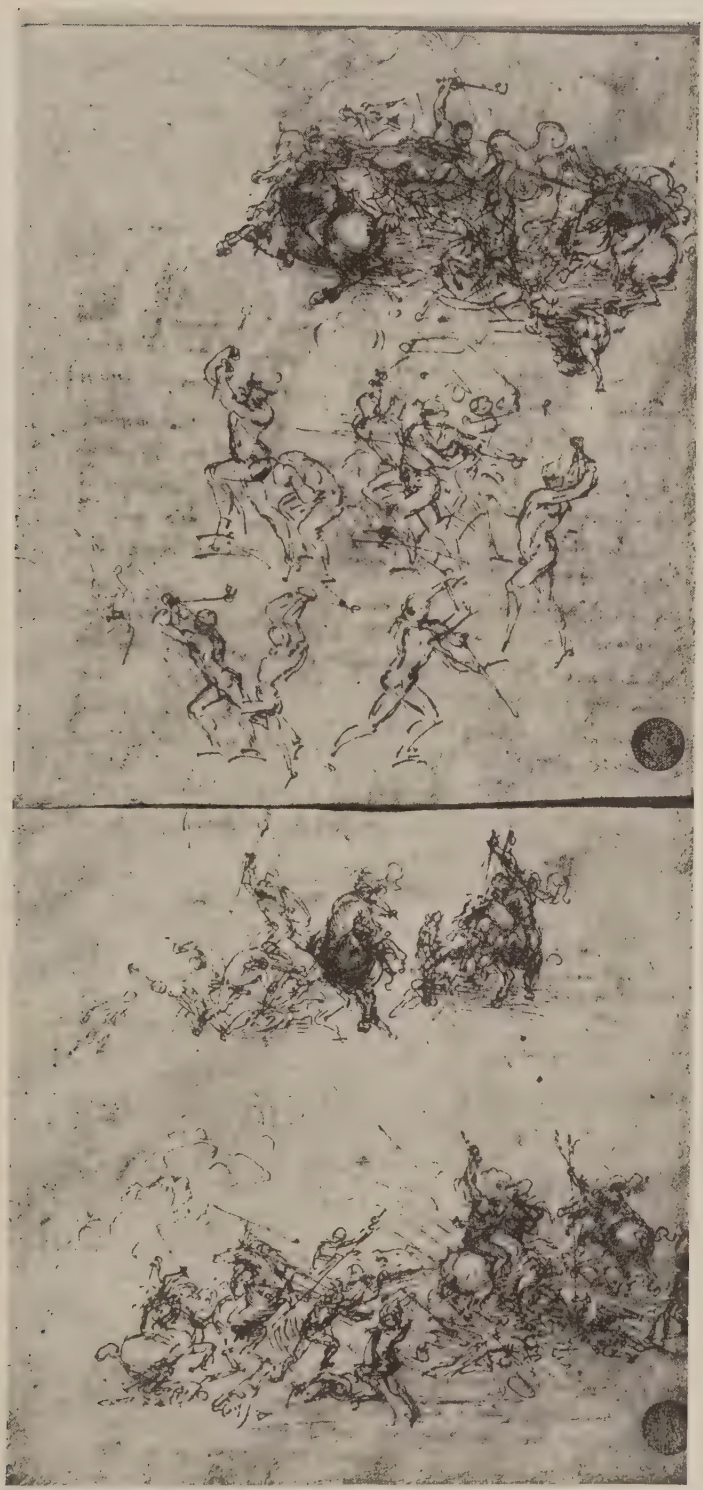
When horse and infantry collide with one another, the strain on both sides seems to become still more violent (*cf.* drawing in Venice). The agile riders, quick as cats, twist about as they hurl the lance at their opponents or their horses; the ground is studded with fallen and wounded in agonized groups, the air is filled with splintered lances and clouds of dust and smoke.

A drawing like this calls to mind Leonardo's description in the "Treatise," which, even if it was not written with direct reference to this cartoon, may yet cast light on the painter's intentions in this work. (The description occurs in a completer form in the Ashburnham Manuscript; *cf.* Richter, Nos. 601-602.)

You should first represent the smoke of the artillery mingling in the air with the dust and tossed up by the movement of the horses and the combatants. This process you should render in the following manner:—the dust, which is of the earth and has weight, although, by reason of its fineness, is easily tossed up and mingles with the air, nevertheless readily falls down again. It is the finest particles of it that mount highest; hence that part will be least visible and almost assume the colour of the air. The smoke which mingles with the dust-saturated air will resemble more and more a dark cloud, the higher it rises; and at the highest point, where the smoke is more separate from the dust, the smoke will assume a bluish tinge, and the dust recover its colour. But on the side from which the light strikes, this mixture of air, smoke, and dust must appear much brighter than on the opposite side.

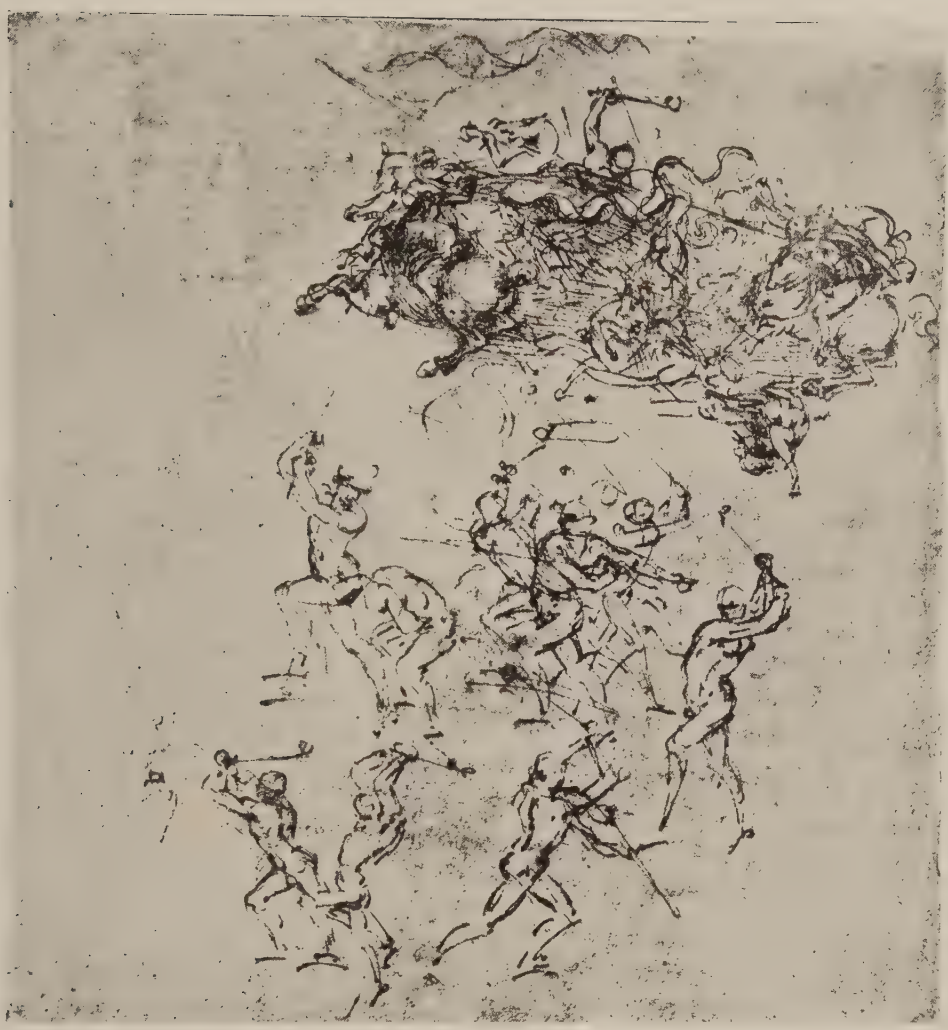
As for the combatants, the more they are in the midst of this turmoil the less visible they will be, and the less will be the contrast between their lights and shadows.

You should give a ruddy glow to the faces and figures and the air around them and to the gunners and to those near them, and this glow should grow fainter as it recedes further away from its cause. The figures which are between you and the light, if far away, will appear dark against a light background and the nearer their legs are to the ground the less will they be visible, for there the dust is greater and thicker. And if you introduce horses gallop-



Leonardo, Studies for the Battle of the Standard

Academy, Venice



Leonardo, Study for the Battle of the Standard

Academy, Venice

ing away from the throng you should make little clouds of dust as far distant from one another as is the space between the strides made by the horses, and the clouds of dust which are most distant from the horses must be least visible; make them high, and spreading and thin, those which are nearer the horses must be more marked, and smaller, and denser.

The air should be full of arrows, flying in different directions, some shooting upwards, some falling, others flying level. The balls shot from the guns must have a train of smoke following their flight. Show the figures in the foreground covered with dust, especially on the hair, eyebrows, and other parts which afford the dust a place to lodge.

The victors you should depict running, with their hair and other light things fluttering in the breeze, the eyebrows bent down, and the opposite limbs advanced simultaneously, so that if the right arm is advanced, the left leg should also come forward. And, if you paint a fallen man, you should show the place where he had slipped and been dragged along in the dust which has become changed to blood-stained mire; and in the half-liquid earth around you should show the prints of the tramping of men and horses who have passed that way. Make, also, a horse which is dragging the dead body of his master and leaving behind him in the dust and mud the track of the body which is dragged along.

The beaten and conquered you should represent pallid, with eyebrows raised and knit together and the skin above the brows furrowed with pain; at the sides of the nose furrows should be indicated going in an arch from the nostrils and ending where the eyes begin, and the dilation of the nostrils, which is the cause of these lines, should be evident; let the lips be arched so as to display the upper row of teeth, and let the teeth be parted after the manner of such as cry in lamentation. Moreover, make someone shielding his terrified eyes with one hand, the palm towards the enemy, with the other resting on the ground to support the weight of the body. Paint others shouting with their mouths wide open, and fleeing. Between the feet of the combatants, you should place all sorts of weapons, such as battered shields and lances, and broken swords and so forth. Make the dead, some half-covered with dust and others with blood all mingled with the oozing mud; and let the line of the blood be discernible by its colour, flowing in a sinuous stream from the corpse to the dust. Show others in the agonies of death, grinding their teeth and rolling their eyes, with clenched fists crushed against their bodies and with legs distorted. Then you might show someone disarmed and struck down by the enemy, turning on him with teeth and nails to take fierce and inhuman vengeance. You might show a riderless horse galloping in among the enemy, with mane streaming in the wind and causing much havoc with his hoofs. Some maimed warrior may be shown fallen to the ground and protecting himself with his shield, while his enemy, bending over him, strives to deal him the death-stroke. There might also be introduced a number of men in a heap over a dead horse. Visitors might be shown leaving the battle and retiring apart from the crowd, with both hands wiping away from eyes and cheeks thick layers of mud caused by the watering of their eyes from the dust. The reserve squadrons you should represent standing filled with hope, but cautious, shading their eyes and peering through the dense and murky confusion, in readiness for the command of their captain; and so, too, the captain with his staff raised, hurrying towards these auxiliaries to assign them the quarter of the field where they are needed; further there should be shown a river within

which horses are galloping, churning up the water all around into a heaving mass of waves and foam and broken water which dashes high into the air and over the legs and bodies of the horses; finally, see that no level spot of ground is left untrampled and undiscoloured with blood.

It has been pointed out with justice that Leonardo in his word-painting and still more in his small drawings for the cartoon, has above all accentuated the frantic, unbridled frenzy in men and horses, *"la pazzia bestialissima."* As a psychologist he thus spans the whole gamut of the human soul, from the fiercest frenzy to the most exquisite tenderness; he not merely depicts, but also interprets and heightens every phase of feeling that can be reflected in a human countenance. In previous instances we have seen his charm as a delineator of feminine beauty and grace; in the battle-piece,—above all in some original studies for the heads of warriors which belong to the National Gallery at Budapest and the Venetian Academy,—it is the delineation of the savage frenzy which irresistibly carries us away. These furrowed warriors' faces,—broadly drawn with soft black or red chalk, in their intense, almost contorted, expression, and with violently contracted eyebrows,—are more like roaring beasts of prey than human beings. They seem ready to attack their antagonists not merely with sword and lance but also with tooth and nail! In power of line and stroke, these heads might be by a classic Chinese master. It is exactly the spirit of the art of the T'ang age.

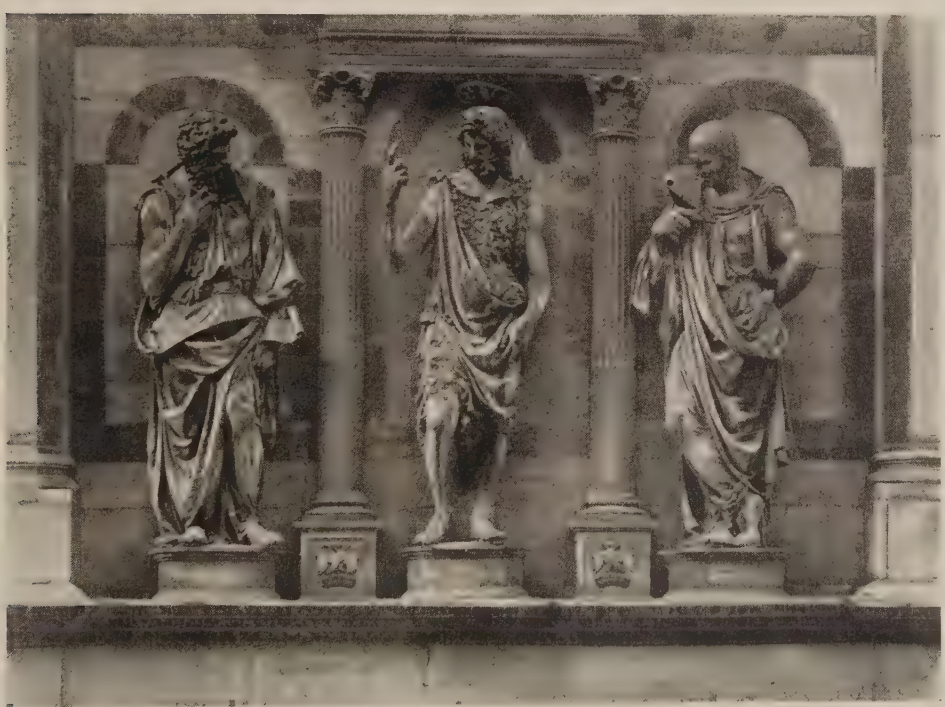
These heads all belong to the warriors in the central group, *The Battle of the Standard,* the only one which was carried into actual execution on the wall of the Council Chamber. The other parts of the composition, for reasons which have been mentioned in the foregoing pages, remained unfinished, but the cartoon was preserved and, together with Michelangelo's cartoon, *The Surprise of the Pisan Soldiers,* was considered as a "school" for all later artists.

This passage of actual painting was naturally copied by more than one artist, and we are enabled to form a good idea of the work in its final state from their reproductions. One of the earliest of these is a drawing in the Malcolm Collection in the British Museum, showing the horseman furthest to the right; another is an oil-painting in the storeroom at the Uffizi. The latter is painted in very dark brown and reproduces the equestrian group with certain parts wanting on one side, which seems to indicate that Leonardo's

Leonardo, Study for a Warrior in the Battle of the Standard

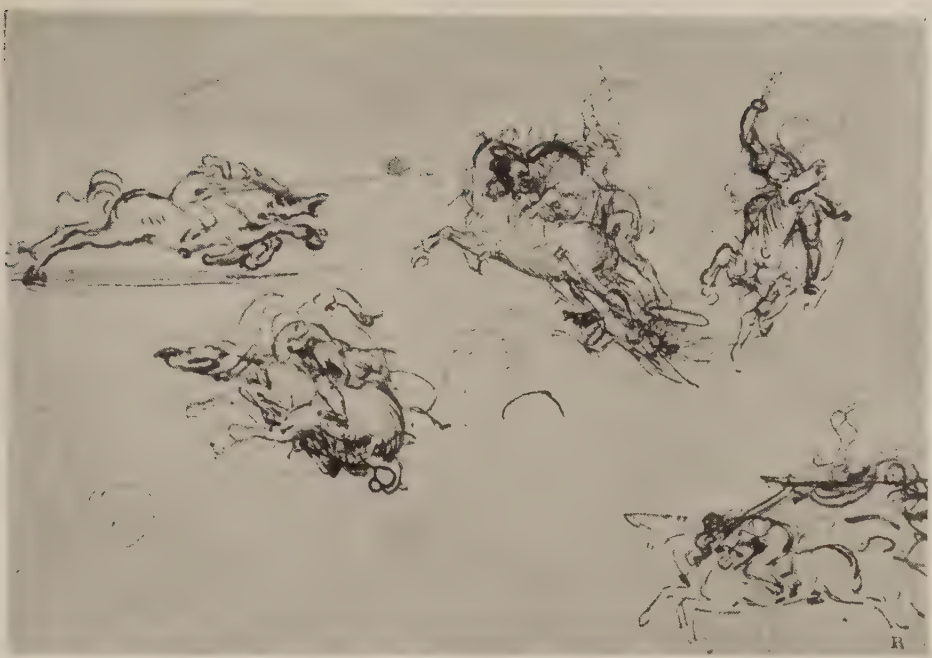
Leonardo, Study for Another Warrior in the Same Picture

Both Drawings in the Museum at Budapest



Giovan Francesco Rustici, John the Baptist between the Levite and the Pharisee

Baptistery, Florence



Leonardo, Studies for the Battle of the Standard
British Museum

Rubens, Drawing after Leonardo's Cartoon for the Battle of the Standard
Louvre

painting was in very bad condition and had already been partially destroyed when the copy was made. This dissolution of the painting probably took place shortly before Vasari painted over its last remnants. An engraving by Lorenzo Zacchia, dated 1558, may well represent the exact year of its ruin.

More nearly complete, but freer in its details, is the large oil-colour copy on canvas in the possession of Mr. Herbert P. Horne of Florence. It belongs to the close of the sixteenth or the beginning of the seventeenth century and follows an earlier exact copy. The paraphrase has a certain Sodomesque touch, particularly in the freely treated landscape and the grayish colour, and some critics have conjectured that the copy back of Mr. Horne's may have been by Sodoma. The air effects to which Leonardo called attention in his description of battle-scenes are attempted; the heavens are all aglow, and against them we see clouds of smoke and dust. The front horses are gray, those behind are brown; armour and weapons are elaborated and ornamented with the greatest care, as they very probably were in Leonardo's painting.

A smaller copy, engraved by Hausoullier and in the possession of Madame Timbal at Paris, also reproduces the group of horsemen faithfully, but the background has been composed pretty freely, and in the Milanese style.

More valuable artistically than any of these is the drawing in the Louvre attributed to Rubens, very well known in Edelinck's engraving. Rubens, of course, did not work after the original painting, but he has succeeded better than any other artist in reproducing Leonardo's effects. Several of his own pictures—as, for example, *The Lion Hunt* at Munich and *The Battle of Ivry* in the Uffizi—almost rival the *Battle of the Standard.*

The free copy of the group of horsemen, shown in the drawing attributed to Rubens, is, perhaps, even more concentrated in action than as sketched in the preparatory studies. An effect of greater violence is produced by the clearer definition of the complicated movements. Not only the charge but the escape—the effort to capture and carry away some part of the flag or its staff—is to be felt in this stupendous impact, this knot of infinite madness of movement, straining in and out to the highest pitch of energy in both horses and riders.

For all its amazing intricacy the scene is lucidly characterized in detail. From the irresistibly charging man in a red cap, who brandishes a scimitar directed towards his adversary's hand,[1] and the helmeted figure in the foreground, leaning to wrench the staff away and spurring his horse over a fallen soldier, through every motive down to the crouching victims, there is the clear prediction of the battle's end and issue. The action is dramatically ordered and reasonable, nor does it lack the purely formal quality of balanced rhythm and structural symmetry, for its bounding lines ascend to form a triangular effect broken by the vivid diagonals of the flashing weapons. Such a scene, of course, has no need of more than a conventional landscape setting, and the original, to judge from the copies and the "Rubens" drawing, probably set the figures in some chiaroscuro against a rather light neutral background.

* * * *

For the full appreciation of Leonardo's treatment of this type of subject, we may briefly compare a few earlier battle-pieces. Passing over such naïve trecento efforts as Spinello Aretino's battle-piece in the Campo Santo at Pisa, we come to Paolo Uccello, who was the first Italian artist to represent equestrian battles with realistic intent. Uccello painted a series of such themes for Cosimo Medici, three of which are extant,—in the Louvre, the National Gallery of London, and the Uffizi. Painted before the middle of the fifteenth century, they are to be judged against the background of the expiring, late Gothic art of the trecento. In this company their naturalistic character is clearly evident. We discover in them a space effect and a plastic three-dimensional modelling of the figures such as none of the later trecentisti had dreamt of. To pass from the Giottesque or Gaddesque company over to Uccello is like being transplanted from picture-books into real life. Uccello was the first Florentine who endeavoured to find an exact theoretical solution of the problems of perspective, and the first,—with Masaccio, who does not essay this *genre*,—to give a true three-dimensional body to his human and animal figures, even when crowded in groups. Is it to be wondered at that he fails to interpret movement, that his action is frozen stiff and

[1] Especially famous since Vasari's day. An old copy of this head is among the Christ Church drawings at Oxford.

Leonardo, Studies of Men and Riders

Royal Library, Windsor

Paolo Uccello, Battle Scene
National Gallery, London

Piero dei Franceschi, Battle between Heraclius and Cosroes
San Francesco, Arezzo

his horses are hobbies, preoccupied as he was with perspective and foreshortening? Uccello's *Battles,* however, have the redeeming qualities of their defects, for while they are wooden enough dramatically, they possess great virtues as decorative design.

In this art motive the mighty Piero degli Franceschi was Uccello's disciple, as we see in one of his frescoes in the choir of San Francesco at Arezzo, the *Battle between the Emperor Heraclius and Chosroes, King of the Persians,* painted in the late sixties, that is, about twenty years later than Uccello's panels. Fascinated, like Uccello, by the problems of perspective and cubical space-effects in the figurative design as bearing upon composition, Piero, of course, goes far beyond Uccello in both representative and tectonic craft. His combination of the decorative tissue with actual sunlight and atmosphere, taken in connection with his severity, breadth, and real characterization in the figure-work, has no counterpart in Early Renaissance painting and is indeed almost without rivalry in its kind in any art.

But Piero's scheme, like Uccello's is a tableau of the battle and not an actualization of its life and movement. Gestures and postures, as in the slashing of swords or the breakneck struggles of horses, are true, but they are conceived in the static mode of "an eternal petrifaction." They are immobile, paralyzed as to action, and therefore seem absurdly undramatic to the vulgar eye, although entirely appropriate for a monumental design and thrilling to the imaginative mind.

Seeing that Piero degli Franceschi, chief technician of his age, was content with an immobile battle, we should scarcely expect lesser painters of the time to do much better; and as a matter of fact, if we except some cassone fronts and a few small reliefs,—of which Bertoldo's well-known bronze in the Museo Nazionale at Florence is the best,—there are scarcely any notable equestrian fights in Florentine art before Leonardo's. The motive, when executed on a large scale, was too difficult, especially in animal drawing, to appeal to the ordinary artist. The descriptive pictures of races and tournaments, the large legendary scenes of mounted figures and the groups in the various *Adorations,* hardly attempt more than a conventional treatment of the horse; even in Raphael's early work the horse is a mere pictorial lay figure, which is, as a rule, represented as perfectly quiet and docile. We can well understand, therefore, what a sensation was

made by Leonardo's revelation of the beauty of the horse and his rider in their real action, and why the big *Battle* struck Raphael in his maturity, and Buonarotti as worthy the tribute of imitation. Neither of these two supreme masters, however, could rival the older artist in the delineation of the horse in movement. Michelangelo seems seldom to have essayed the motive, but it is said that there were horsemen in the background of the fresco which he executed opposite to that of Leonardo in the Palazzo Signoria. He doubtless wished to exhibit his prowess in competition with Leonardo even in the province of animal painting, and his study of Leonardo's *Battle* cartoon is shown in a hasty sketch in the British Museum containing also drawings for the statue of St. Matthew.[1] The sketch probably belongs to the beginning of the year 1505, when Leonardo's cartoon was ready but while Michelangelo was still working on his. The group contains both horsemen and foot-soldiers in similar postures to those in Leonardo's drawings. A later chalk drawing in the Uffizi, representing a rider on a rearing horse seen from behind, may also have been suggested by Leonardo's design.

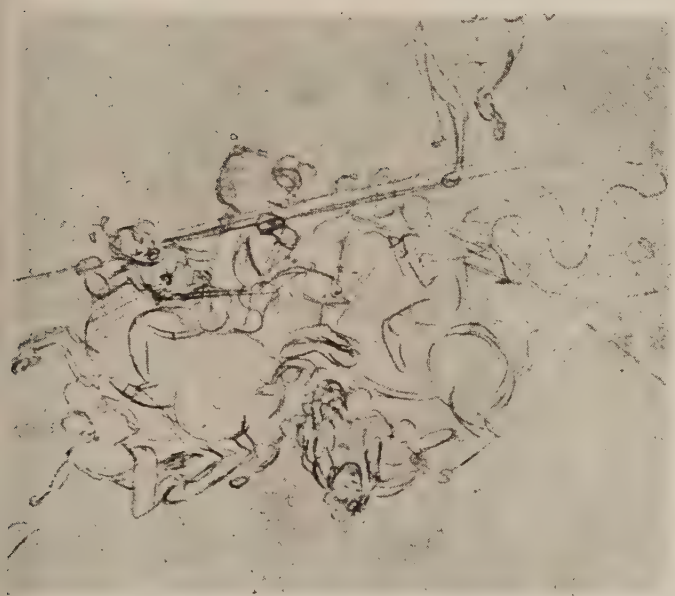
With regard to Raphael's admiration for Leonardo, Vasari relates that while the young Urbinate was engaged "in drawing cartoons for the paintings in the Cappella Piccolomini at Siena" the report reached him through some painters of the composition which Leonardo had executed at Florence. He immediately broke off his work at Siena and went to Florence where he remained for some time as the guest of Taddeo Taddei.

A number of drawings and paintings belonging to this period show plainly how potent and momentous were the impulses which Raphael received from Leonardo. In the foregoing pages we have already mentioned some of these works in connection with the *Adoration of the Magi,* the *Mona Lisa,* and the *Santa Anna Metterza;* in the next chapter we shall have occasion to notice Raphael's copy after Leonardo's composition for the Leda. Here we must call attention to one of Raphael's Oxford sketches which reproduces the central group out of Leonardo's cartoon for the battle-piece. Above the main group is added a horse seen in foreshortening from behind, which we recognize from Cesare da Sesto's drawing. In another and much damaged sketch in the Dresden print-room, Raphael seems to repro-

[1] *Cf.* Berenson, *op. cit.,* Vol. I, p. 178.

Leonardo, Drawing of a Tree
Windsor

Michelangelo, Fighting Men on Horseback
British Museum



Raphael, Sketch after Leonardo's Battle of the Standard
Christ Church, Oxford

Michelangelo, Man on Horseback
Uffizi

duce from memory a fleeting impression of the action as a whole; and there are plenty of other drawings of the time,—single figures, children, and youths,—which indicate clearly how receptive Raphael was to Leonardo's influence.[1] Probably the young genius, a willing and intelligent learner, was on friendly terms with the *doyen* of Florentine art and had access to the sketch-books, from which he borrowed not merely various motives and figures, but an entirely new style of drawing, quite different from the rather dry and timid manner which he brought with him from Umbria. These remarkable Florentine years in the middle of the first decade of the sixteenth century in fact mark a culmination and a turning-point in the art-life of the city on the Arno, and thus indirectly in that of the entire European art of that era.

* * * *

On the 30th of May, 1506, Leonardo obtained permission of the Signory to leave Florence on condition that he should appear within three months before the priors of the city; if he exceeded this term he was to be fined 150 ducats. However, new masters and new commissions delayed the artist's return till the end of the year. He never had either time or inclination to resume the interrupted painting in the Great Council Chamber.

The cartoon for the great composition was deposited in the Bank of Santa Maria Nuova, where Leonardo left all his valuables when he went away. Benvenuto Cellini who saw it much later speaks of it, together with Michelangelo's cartoon for the *Surprise of the Pisan Soldiers,* as "the School of the world." There probably still remained fragments of Leonardo's painting when Vasari and his assistants in 1557 began to rebuild and decorate the "Sala del Gran Consiglio," now the "Sala del Cinquecento," but, strangely enough, Vasari maintains complete silence about the matter. Perhaps he did not find it expedient to mention it, seeing that he had been compelled to paint what was left of it,—his orders from high quarters admitting no choice on his part in the rebuilding of the hall.

Leonardo, on the whole, seems to have had more depressing than joyful experiences in Florence during this period. On the 6th of July, 1504, he records in his note-book: "Wednesday, at 7 o'clock in the morning, died Ser Piero da Vinci, notary to the Palazzo del

[1] *Cf.* Gronau, "Aus Rafaels florentiner Tagen."

Podesta, my father. He was 80 years of age (according to the document 77), and left ten male, and two female children."—The father left him without inheritance on account of his being a natural son, and his step-brothers do not seem to have felt kindly toward him, to judge by the fact that they afterwards brought an action against him to prevent him, on the ground of his illegitimate birth, from entering into possession of a little property at Fiesole which had been willed to him by an uncle.

A source of greater mortification and humiliation to Leonardo than the petty spite of his relations was, apparently, his artistic rivalry with Michelangelo. Although a considerably younger man than Leonardo, Michelangelo had already won a leading position among the artists of Florence; he was particularly favoured by the Medici, and in fact received official commissions to paint in rivalry with Leonardo. His passionate, titanic nature was unsympathetic with that of the self-possessed thinker and observer, and the essential incompatibility of their temperaments is shown by an anecdote of the two artists while together at Florence which has been preserved in the Codice Magliabechiano. The worst of the story is that it is probably true and reveals too much of Buonarotti's testy impatience.

When Leonardo was walking one day with Giovanni da Gavina along the bank of the Spini close by Santa Trinita, there were assembled at that spot several eminent men discussing a passage from Dante. They called to Leonardo and begged him to explain the passage in question. It happened that Michelangelo was passing by at that moment. (He was known as an assiduous student of Dante.) Someone hailed him and Leonardo exclaimed, "Michelangelo will explain it to you!" Michelangelo supposed that Leonardo had said this in order to make fun of him and so answered angrily, "Explain it yourself, you who made a drawing for a horse to be cast in bronze, but could not cast it, and to your shame left it in the lurch!" With these words he turned his back on the group and went away, but Leonardo remained standing there colouring at his words. Moreover [the narrator adds], Michelangelo, wishing to give Leonardo another sting, said, "And those Milanese capons believed in your ability to do it!"

The episode seems to have taken place previous to the miscarriage of his picture in the Great Council Chamber, an event which doubtless conduced to increase the tension between the two masters.

The permission accorded to Leonardo (May, 1506) to absent himself from Florence for three months was thus, doubtless, particularly acceptable. As a matter of fact it was probably due to an invitation from the French Governor of Milan, Charles d'Amboise. The

latter, who was a lover of art, set a high value on Leonardo, and having once taken him into his service, was not willing to let him go so soon. When his leave had expired, the Governor wrote to the Signory at Florence, requesting that Leonardo be allowed at any rate to stay until September, "Since we have still need of the master, in order to finish certain works which we have commissioned him to execute." The Signory granted the desired prolongation of leave, but, when a similar request was again put forward at the end of September, Pietro Soderini the Gonfaloniere replied with the following curt lines:

Florence, the 9th of October, 1506.

May your Excellency excuse us from granting Leonardo one day's further leave of absence; he has not behaved as he ought towards this Republic, in that he has received a large sum of money and made a little beginning upon a great work which he has engaged to carry out; and he has shown himself to be a laggard, out of deference to your Excellency.

The letter did not have the desired effect. Leonardo still remained at Milan with Charles d'Amboise. Finally, on the 15th of December, the latter seems to have been willing to let the artist go. He wrote to the Florentine Signoria:

Most honourable and noble Gentlemen, honoured brethren. The excellent works which Leonardo da Vinci, your fellow-citizen, has executed in Italy and in this city in particular, have in all who have seen them inspired love to the artist even if they have not seen him in person. And we will confess that we are of those who loved him even before we had learnt to know him. But after we had come into touch with him and had put his many-sided ability to the test in actual experience, we realized in truth that his name, renowned as it is in painting, is obscure in comparison with what it deserves to be in virtue of the supreme skill he possesses in other spheres; and we will admit that by the work he carried out for us, drawings, architecture and other things of which we had need, he not merely gave us satisfaction but commanded from us admiration. Since it pleased you to surrender him to us as a gift during the past days it would be ungrateful, now that he is returning to his native parts, not to give expression to all our gratitude. Therefore we thank you with all our heart; and, if it be at all seemly to recommend a man of such excellence to his fellow-countrymen, we do so herewith as strongly as possible.

However, Leonardo does not seem to have felt any inclination to return to his native city and all its vexations. He stayed on at Milan, perhaps in consequence of pressure from high quarters. On the 12th of January, 1507, the Signoria received the following letter from Francesco Pandolfini, Florentine ambassador at the court of Louis

XII at Blois: "Being this morning in the presence of the most Christian King, his Majesty called me, saying: 'Your Signory must do me a service. Write to them that I desire the master, Leonardo, their painter, to serve me; I wish him to make several things on my account. See that their Lordships exhort and command him to serve me, and that he do not leave Milan before my arrival. He is a good master, and I desire certain things from his hand.' All this has been occasioned by a little picture by his hand which has recently arrived here and is considered to be an excellent work. In speaking with him, I asked his Majesty what kind of works he desired. He replied: 'Certain little panel-pictures of the Madonna, and other things as the fancy shall take me, and perhaps I shall also have him paint my portrait.'" Some days later the King himself wrote to the Signory to the same effect.

On the 24th of May, 1507, Louis XII made his entry into Milan. Leonardo was probably present and arranged the festal decorations.

It was easy for him to win the affections of the French King. "His was a charming personality, with a brilliant and grand manner; his face was the most beautiful in the world," writes Paolo Giovio. "As he was a wonderful inventor and a master in all kinds of elegant arts and particularly in theatrical entertainments and also sang very beautifully to the lyre, he was greatly pleasing to princes all his life through." King Louis calls him, in a letter of the 24th of July, 1507, "Notre très chier et bien aimé Léonard de Vince," and when Leonardo, in the autumn of 1507 (probably in September), returned to Florence to defend himself in the lawsuit which his brothers had brought against him, he was furnished with letters of recommendation from the French Vice-regent. Louis also addressed in his own name an injunction to the Florentine Signory to make the suit as brief as possible and not to detain the artist in Florence. However, the lawsuit dragged on, not merely to the end of that year but also well on into the next.

During this time Leonardo, according to a statement in the Codice Magliabechiano, lived at the house of the sculptor Giovan Francesco Rustici in the Via Martelli; the latter was engaged on his big bronze group for the north porch of the Baptistery representing John the Baptist between the Levite and the Pharisee. According to tradition Leonardo actively assisted Rustici in this work, as seems

to a certain extent likely from the rather Leonardesque style of the figures. The group, as a whole, is one of the most important works of sculpture of the High Renaissance. Leonardo's co-operation in this work is also mentioned by Vasari at the end of his life of Rustici.

Otherwise the master was employed in the usual way: "Begun at Florence in the house of Piero di Braccio Martelli on the 22d of March, 1508," we read on the first page of one of his note-books, now in the British Museum, and further: "This is to be a collection of all kinds of things which I have taken from different papers and which I have copied here; I hope soon to be able to put them in order, everything in its place according to its subject, and I think that before I have reached the end I may repeat the same thing several times, but the reader must not blame me if my memory does not serve. . . ."

It was Leonardo's habitual method of work to jot down anything that occurred to him irrespective of order and subject, in the hope that he might afterwards find time to work out treatises on the different questions. Unfortunately none of these works ever got beyond the preparatory stages.

His artistic work during this period seems to have proceeded rather slowly. The perpetual reverses he had experienced in this sphere seem to have disinclined him for effort. We hear only of two small Madonnas which he felt bound to execute for his French patron. He mentions them in a letter to Charles d'Amboise (Cod. Atlant.), but whether they were actually completed or not is uncertain: "I am sending Salai to inform your Excellency that I am almost at the end of my litigation with my brothers and that I hope to be in Milan by Easter. I shall then bring with me two Madonnas of different dimensions which I have begun to paint for the most Christian King or for whomsoever shall please you."

There are no exact data as to how the lawsuit with his brothers ended. Different conjectures have been put forward, all equally unsupported. The only positive fact is that Leonardo was back in Milan by the summer of 1508, for in the month of July he received an allowance from the French King.

XIII

THE LEDA COMPOSITIONS. JOHN THE BAPTIST

On the testimony of Vasari, Lomazzo, and other authors, and with the guidance of the artist's own drawings, we can be sure that Leonardo during his later period of activity in Italy designed several important mythological compositions. Vasari mentions a large painting of *Neptune* driving in his chariot, said to have been made for Antonio Segni. Lomazzo, in his "Trattato dell'arte della pittura," speaks of a *Leda* "entirely nude with the swan in her arms, and with her eyes cast shyly down"; and in his other work, *Idea del tempio della pittura,* of a smiling *Pomona,* who on one side was covered by three veils, which Leonardo painted for Francesco Valesio. Moreover, Amoretti mentions *la Flora, la quale fu designata da Leonardo e dipinta da Francesco Melzo;* and other writers attribute to Leonardo a *Bacchus.*[1] Now, how far are these statements confirmed by Leonardo's extant drawings and paintings?

This question will be answered in the following exposition, which will not be by any means negative even if no entirely authentic and completed painting of Leonardo's answering to the above descriptions any longer exists.

The representation of *Neptune,* driving with his team of four horses over the wild track of the sea, we know from a preparatory red-chalk study for the composition, executed in the broad, picturesque manner characteristic of Leonardo's later Florentine period. This drawing may be regarded as a pendant to the studies for the battle-piece; for here too the artist develops the equine traits and movements, although these are sea-horses with dragons' tails and fins on their forefeet. The head, the neck, and the shoulders portray actual horse nature to perfection as the fabulous animals rear wildly,

[1] *Cf. Archivio Storico Lombardo,* Ser. IV, Fasc. XIV, and Amoretti, *Memorie storiche.* The Milanese writer, De Pagave, declares himself to have seen certain mythological drawings by Leonardo in the house of Orazio Melzi. *See* Seidlitz, *op. cit.,* II, p. 132.

Leonardo, Neptune Driving His Team. Red Chalk Drawing
Royal Library, Windsor

Leonardo, Studies for the Head of Leda
Windsor

Leonardo, Study for a Kneeling Leda
Windsor

Raphael, Drawing after Leonardo's Leda

Royal Library, Windsor

lifting their snorting heads like huge, foaming waves, and lashing out with their forefeet, their spiral tails curled up like waterspouts. The movement is a balance of opposing strains, the horses drawing in pairs in different directions. In the midst Neptune lifts his trident high in the air to goad on the ungovernable animals. He appears knee-deep in the water, the chariot being only slightly indicated. The hand which holds the reins is firm as iron in its control of the horses, which are compelled to turn their heads back and bend their necks in violent curves. The whole composition is one of tensest nervous energy, suggestive of a gathering storm which is about to burst.

Leonardo's Leda composition can be studied from the evidence of copies and studies, although the literary and historical notices are few. Vasari says nothing whatever about Leonardo's *Leda,*—the composition does not seem to have been generally known at Florence,—and, what is still more remarkable, the otherwise well-informed author of the Codice Magliabechiano first notes among Leonardo's works *"una Leda,"* and then strikes this out and changes it to *"un Adamo ed Eva d'aquarello."* Lomazzo, however, as we have said, gives a few brief notices as to the *Leda;*[1] and Leonardo's drawings settle the matter, for they treat this motive over and over again, while his pupils and imitators translated it into numerous pictures.

Among these Leda compositions one can distinguish two main groups, one characterized by the standing, the other by the kneeling figure. It is hardly possible to date these compositions exactly, but it seems probable that they saw the light during Leonardo's later residence at Florence; at all events this can be assumed with the greatest probability with regard to the upright design. We only possess a miniature study by Leonardo himself for this composition (in the Codice Atlantico), but it was copied by Raphael in a drawing (in the Windsor Collection), which can be dated with certainty as belonging to Raphael's Florentine period, being thus previous to 1506. It is true that the authenticity of the drawing has been called in question by some critics. Morelli ascribed it to Sodoma and built up on this basis a whole theory as to Sodoma's *Ledas;*[2] but renewed studies of

1 The historical notices with regard to Leonardo's Leda have been brought together by Müller-Walde in the article "Beiträge zur Kenntniss des Leonardo da Vinci," II in the *Jahrb. d. kgl. preuss. Kunstsamlungen*, 1897.

2 *See* Die Galerien Borghese and Doria Pamfili, pp. 190ff.

Raphael's Florentine drawings have more and more led us to believe in Raphael's authorship for this remarkable sheet.[1] The execution (pen and bistre) has a much greater clearness, firmness and accuracy than we find in Sodoma's authentic drawings. The palpable stiffness of the figure was probably to be ascribed to the artist's having felt himself strictly bound by the original design.

Leda is standing, her right foot firmly planted, her left foot lifted ready for walking. She thus bends and leans outwards, yet turns towards the swan, who stands on the opposite side, craning his neck and embracing the nymph with one wing. She grasps its neck, turning her head away as if to avoid its caresses. The movements, however, are so timid that the compositional elements lose articulation and harmony. The swan in particular is quite devoid of grace; it has been suggested that it looks more like a big goose.

Among the extant paintings, the large *Leda* in the Borghese Gallery most closely follows this drawing. Morelli attributed this painting to Sodoma, but wrongly, in our opinion; in any case, it is not a characteristic work of Sodoma. The background landscape, the treatment of the trees and the towering rocks point rather to a Florentine painter; but the question of authorship is of no especial importance and may be left open. The picture belongs to the beginning of the sixteenth century, and closely followed Leonardo's composition, whether the latter was known only by sketches or by some large cartoon. The Leda's pose and its relation to the swan are like those in Raphael's drawing, but the movements are much freer and more flexible. The undulating play of line in the woman's body, which is in *contraposto* and curved in a prolonged S-line, is soft and caressing. The head leans like a heavy flower to the side, the whole figure seeming in dreamy repose. Of all known copies this figure seems nearest to Leonardo's conception, although the picture as a whole by no means leaves such a pleasing and consistent impression as a couple of other copies. We miss the picturesque *sfumato* which in a work by Leonardo's own hand would doubtless have conduced to the still more refined modelling of both figures. The swan appears rather fat and clumsy; it is only in the curves of the neck that we find some of the beauty of the Leda figure.

[1] *Cf.* Gronau, "Aus Raphaels florentiner Tagen," p. 29, and Fischel's work on Raphael's drawings.

Florentine Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda

Galleria Borghese, Rome

A very remarkable thing in this picture is that out of Leda's four children only the two boys, Castor and Pollux, have been included. The girls, Helen and Clytemnestra, who in other renditions always accompany the brothers, seem not yet hatched from the eggs, although the boys are already old enough to run about gathering spring posies. These children are apparently a free invention of the copyist, who has not painted them small enough for the old myth—they are hardly those little newly hatched divinities in human flesh which we elsewhere find. The foreground flowers and the birds showing their amazement at the strange chicks are also exceptionally free additions. The master's original has evidently controlled nothing but the main group.

It seems that the group must surely have existed in a large cartoon, although there is no other evidence from Leonardo's own hand than the miniature drawing in the Codice Atlantico, and partial studies on a larger scale. Among the latter the Leda heads at Windsor are most deserving of attention. In four different sheets of careful pen and bistre studies, in parallel lines both from left and right, the beautiful flower-like head is given in different positions. The modelling is well worked out; but the most study has been spent on the elaboration of the intricate headdress. The same master who probed secret mysteries of the soul and gave to the female countenance the finest shades of half-conscious emotion, has worked out the basket-pattern and spiral mazes of the plaits with a care and a patience which, to go by Vasari (and we might include the whole mass of "fa presto" painters of the late Renaissance), "makes one's brain reel." Characteristically enough, not content with drawing parts intended to be visible in the picture, he also aims at perfect clearness in the intricate system of plaits, and so has drawn the head from behind as well as in other poses. He was evidently interested in a special way by the play of the lines in the coil. According to tradition, Leonardo took the youth Salai as his pupil, on account of his being so radiantly beautiful and having a mass of curly hair in which Leonardo took great delight (*"capegli ricci ed innellati, di quali Leonardo si diletto molto"*).

In the Borghese picture as well as in Raphael's drawing, we find the intricate dressing of the hair with the spiral ornament on the temples, but it is far tamer. This is another reason for thinking

that the principal figure in the copies goes back directly to Leonardo's original cartoon. That such a cartoon existed is asserted, amongst others, by the English traveller Edward Wright, who declares that he saw it in the year 1721 in the house of Marchese Casnedi at Milan. What became of it afterwards no one has yet been able to find out. Lomazzo maintains that Leonardo's *Leda,* together with the portrait of Mona Lisa, was purchased by King Francis I and incorporated in the collections at Fontainebleau; but it is quite conceivable that this was one of the pictures finished by some pupil after the master's original. Leonardo's composition (or cartoon?) must in any case have existed for a long time at Milan (he had probably brought it with him from Florence), for it was copied by both native and foreign artists in the beginning of the sixteenth century.

Among these copies should be noticed in connection with the picture in the Borghese Gallery, a somewhat smaller picture (fifty-two by forty-one inches) formerly in the possession of the Marquis of Hastings and then in the Doetsch collection; where it now is, I do not know. In the catalogue of the Doetsch sale it is reasonably attributed to Giovan Pedrino. The main group is substantially the same as in the Borghese picture, but the swan is less big and clumsy. His bill does not reach quite so near Leda's face, his neck is laid in deeper curves, and other things in the composition show even greater divergencies. The landscape is purely Milanese: it shows the sea opening to one side, with sharp, bleak rows of rocks bounding the other side; as a connecting *coulisse* in the centre (a common motive in Leonardesque pictures) is a group of trees with shady crowns. Low, dark bushes border the foreground as a foil to the four little white figures, offspring of the god, who crawl on the ground at their mother's feet as she smiles down upon them. The child-types are characteristic of Giovan Pedrino's exaggerated Leonardesque style; with slight variations they recur in other works of this manneristic artist.

A little painting (thirty-eight by twenty-nine inches) in the possession of the Earl of Pembroke at Wilton House gives the figures exactly in the same position as the Doetsch picture but the landscape is evidently more Leonardesque. As we have not seen the picture itself, but only the beautiful reproduction in the Wilton House Catalogue, we do not dare to pronounce any opinion in regard to the

Milanese Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda

Formerly in the Doetch Collection

painter, but he belonged evidently to Leonardo's closest followers in Milan.

We may, with great probability, learn Leonardo's idea of a design for these four children from some other copies, which, partially at least, spring from a different original than those previously described. In the two foregoing copies we have found Leonardo's drawing and composition only in the Leda figure and in the swan; in the remaining copies we may presume that the master had also indirectly determined the composition of the children's group.

Among these should be mentioned a large picture belonging to Mr. John G. Johnson of Philadelphia.[1] The landscape, the buildings and the cold greenish tinge of the atmosphere betray a northern painter, probably a Flemish Roman from the school of Joos van Cleve or Barent van Orley. The principal group differs very slightly from that of the previous picture. Leda's gracefully curved posture and the soft *contraposto* of the trunk, breast, and head, are to be recognized; but instead of the coiled coiffure, long soft plaits fall down over her shoulders and breast, the longest plait down to her loins, where it is pressed to her hip by the wing of the swan. Here again she turns away her head smilingly from the bird, and glances obliquely downwards on the four little ones who have just broken through the egg-shell, and are now crawling cheerily about on the soft carpet of flowers. These children are much better drawn and proportioned, as well as more elegant, than their earlier counterparts. Their movements are manifold and complicated, without being artificial. They are engaging little figures, imbued with the same natural grace which we find in Leonardo's children. The boy to the left and back assumes a posture which we see in one of the boys in the well-known pictures of the infant Jesus and John embracing one another, of which several replicas are known (Hampton Court, Mond Coll., Lord Ashburton, Naples Museum), all going back to a common lost original, probably by Leonardo. The little girl in the foreground, with her back turned towards the beholder, is recognizable as the child in Madonna pictures of Leonardo's school and in some by Raphael. All the different movements in these children are, moreover, so masterfully conceived and expressed that this

[1] Possibly it was this same picture that Wagen saw at Mr. Alexander Barker's in London and attributed to the "Meister des Todes der Marie."

fact in itself strongly suggests that they were copied from a design by Leonardo's own hand.

Another faithful copy of the same composition confirms our conjecture that a definite original by Leonardo existed also for the group of children. This picture formerly belonged to the de la Rosiere Collection, and is now in the possession of Baronne de Ruble in Paris. The composition of the figures is similar to that in Mr. Johnson's picture with somewhat ampler proportions in the woman's body, the vaselike contours of the lithe frame being a little more elegant, the head narrower, and the plaits not falling so low. Moreover, Leda holds a bouquet in her right hand which rests on the swan's back. The swan and the children, who are extricating themselves from the broken shells, are quite the same as in the previous example. There can be no doubt whatever that these two pictures were painted from the same original. But the copyists are widely different from one another, and both betray their origin in the parts they have added out of their own heads. We refer first to the elements of the landscape, the flowers and grasses of the foreground, the mountain and tree scenery of the middle distance and the far-receding view in the background. In these the author of Mr. Johnson's copy unmistakably betrays a northern origin, while the painter of Baronne de Ruble's picture reveals himself as a Venetian of the middle of the sixteenth century. The ensemble of the Venetian production has, moreover, a softer and pleasanter tone than any of the other copies. It appears to have been done by a painter with more feeling for colour than for Leonardo's severity of design.

A third and smaller copy, belonging to Frau Baurat Oppler at Hanover, deserves to be brought forward as additional testimony to the extraordinary popularity of the theme. It shows the principal figure and the children in exactly the same poses as in the two foregoing instances, but the background landscape and the *coulisses* are considerably simplified and more summarily treated. The principal figure thus asserts itself and, in fact, it was probably this figure only which was taken from Leonardo's original. With reference to this studied attention to the pose, the artist's own words should be recalled: "Never place the head straight on the shoulders but obliquely, to the right or left, even if the gaze is directed upwards, downwards, or straight in front. The movement should be such that it exhibits

Venetian Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda

Baronne de Ruble, Paris

North Italian Painter, Beginning of XVI Century, Free Copy after Leonardo's Leda

Frau Baurat Oppler, Hannover

Franciabigio, Leda with Her Children

Museum, Brussels

vivacity, and not sleepiness. And do not make the front and back of the figure so that the upper part stands perpendicularly above the lower. . . . Do not repeat the same movements in the arms and legs. . . . If you want to represent anybody bending back or to the side for any reason, you must not let him at the same time turn his feet and all his limbs in the same direction as the head, but rather have him make the turn so that it is distributed over four joints, namely, the joints of the foot, knee, hip and neck."

Leonardo's Leda composition appears in a free paraphrase in several later pictures, among which we may notice Franciabigio's *Leda* in the Brussels Museum (No. 415, attributed to Andrea del Sarto).

Franciabigio was one of the younger talents of Florence who learnt more during Leonardo's short sojourns in their native city than they did all the rest of the time from any master permanently domiciled there. He was in his twentieth year when Leonardo was working in Florence during his second period, and was then naturally susceptible to new impulses. His temperament was sensitive, with a particular leaning towards lyric warmth of feeling and he possessed a more delicate sense of beauty than most of his fellow-craftsmen. The shadowy, half-exotic charm of Leonardo's women appears to have exerted a peculiar fascination on the young Franciabigio, and he is not wholly unsuccessful in capturing the Leonardesque smile. His Leda figure approaches Leonardo's rhythmical harmony of drawing in the female nude. The pose is substantially the same as in Leonardo, but the forms are a little more slender and the carriage a trifle stiffer. The whole spirit of the motive, however, has been changed by the turning of the Leda's face towards the swan with a touch of morbid sensual suggestion. But Franciabigio still preserved the poetry of the legend where the vulgar late painters saw only grossness. The four little children at Leda's feet refresh the tone with their delicate sensibility and we feel that the artist's imagination is still upborne by a breeze from the golden age.

In Leonardo's *Leda* compositions the motive seems to have served rather as a pretext for a poem of form and line, in which the rhythmic melody of the swan's neck and the woman's body are the leading cadence, than as an occasion for the expression of any sensuous feeling whatever. Leonardo's women are not beings with hot

blood and strong passions; they display nothing of the emotional yearning of Botticelli's Madonnas or of the sensual voluptuousness of the Venetian goddesses; their world is rather that of contemplative life or of intellectual dreams. Sometimes they resemble handsome youths, and one comes across figures of Leonardo's having an almost androgynous character. In this respect and for the same natural reason he is, quite unconsciously, no doubt, repeating an instinctive ideal of the Greeks and of his friend Botticelli (*cf.* Botticelli's angels). We may cite Leonardo's remarks on this subject, which are entirely naïve, and which abundantly prove the natural origin of his conception, as illustrated in the *Leda* and elsewhere.

"Women should be represented with modest postures,—the legs kept close together, the arms crossed, the head bent on one side or downwards.

"In women and young boys there should occur no straddling or too open postures, for they express boldness and lack of modesty. The tightly closed postures, on the other hand, express timidity and modesty."

As a whole, Leonardo attaches the very greatest importance to the pose and carriage of his figures; he writes on this point as follows: "The posture is the first and most essential thing in figure painting; for not only is a rather unsatisfactory impression left by a painted figure which has a bad posture, in other respects however good, but a living figure of the greatest beauty loses much of its effect if the movement is not suited to the task it has to perform. In painted figures posture certainly demands more thought than general good appearance, for the latter can be attained by careful copying of a living model, whereas proper action in the figure can only be obtained by very delicate artistic feeling (grande discrezzione d'ingegno)."

It was doubtless in obedience to such theoretical ideals of purposed and studied adjustments in pose that Leonardo abandoned the standing *Leda* in order to work out a more inwrought composition with many-sided movement in a kneeling figure. This new formal conception was developed in certain small drawings, namely, in two pen-studies, executed in the same painstaking manner with parallel strokes from both sides that we observed in the preparatory studies for Leda's head belonging to the collections at Weimar and Chats-

Leonardo, Study for a Kneeling Leda

Duke of Devonshire, Chatsworth

Leonardo, Study for a Kneeling Leda

Ducal Palace, Weimar

worth, and in two rapid outline drawings in the Windsor Collection. The two first-named drawings were attributed by Morelli to Sodoma, like the studies for Leda's head and the painting in the Borghese Gallery; but according to Dr. Frizzoni, Morelli's successor and editor, the eminent critic, had it been vouchsafed to him to continue his studies of Leonardo, would probably have ended by acknowledging both the drawings as authentic works of Leonardo. It is outside the scope of this work to enter into a detailed examination of Morelli's bold theory as to Sodoma; the reader may be referred to Frizzoni's articles in *L'Arte,* 1905, and in the *Rassegna d'Arte* of the same year. I wish merely to point out that there does not exist a single study of Sodoma's with anything like as firm and powerful a modelling of the figures as in these masterly drawings. The differences between the two studies, the one at Weimar and the one at Chatsworth, are comparatively insignificant. In both cases Leda is resting one of her knees on the ground and directing the other diagonally towards the beholder; the upper part of the body is in *contraposto* to the trunk and is inclined towards the swan, whose neck she caresses with her left hand. The other hand extends downwards towards the children who are lying on the ground just hatched out of the eggs. She seems to wish to divide her caresses and her tenderness between the two recipients, the heavenly lover on the one side and the newly born offspring on the other. Owing to the position of the arms and the turn and compression of the chief figure, the composition is almost triangular, but within this limiting circumference the lines of movement are as manifold as is conceivably possible. It is an ideal High Renaissance composition, designed with surpassing knowledge of the dynamic potentials of expression in the human figure. Michelangelo himself could scarcely have educed greater variety of turns and bends, or utilized more exhaustively the muscular system in a kneeling figure. The pose is strained but at the same time characterized by an elastic tension which brings every muscle into magnificent play. One may search in vain in the entire range of Renaissance art for a female nude with more complicated and expressive movements.

The drawings at Windsor are more hastily sketched but scarcely less lovely. Leda is here unaccompanied by the swan and there is

only one child. The figure is seen almost full front but with the left leg turned to the right while the arms are moved in *contraposto,* thus producing a play of crossings and foreshortenings and the little figure as a whole is lithe and agile as a cat.

Whether Leonardo executed any large cartoon or painting of the kneeling Leda is still more uncertain than in the case of the standing figure. But at all events the composition was turned to use in his school. It is most completely worked out in a picture by Giovan Pedrino, now in the possession of the Prince of Wied in the Castle of Neuwied, although at the beginning of last century it still formed part of the Hesse-Cassel State Collection. The Leda appears in this picture also without the bird and her pose is substantially the same as in the little drawing, but the movement of the arms is entirely modified. Instead of carrying both arms over to one side, one of them is directed downwards toward two of the children who are just creeping out of the egg-shell while with the other she hugs a third child to her bosom. The fourth of the newborn offspring sits on the ground gazing at his mother with amazement while she pays no attention to any of them, but looks away with Pedrino's customary insinuating smile as if to exhibit her brood. This picture has also gone under the name of the *Caritas,* a title explained by the absence of the swan and the prominent rôle assigned to the infants. The confusion of names is in itself very significant of the freedom in the Leonardesque conception from any vulgar animalism.

The formal motive in Leonardo's kneeling *Leda,* as reproduced in this work by Giovan Pedrino, is directly reminiscent of *The Virgin* in the earlier cartoon for the *Santa Anna Metterza* composition (*cf.* the reproductions), strikingly so in the turn of the hips and the raised knee. But the *contraposto* movements are here more manifold, the elastic tension stronger; and as, moreover, the *Leda* is in the nude, the effect of the figure is all the richer. In later Leonardesque pictures we sometimes find a blending of motives taken from both the Virgin in the *St. Anne* cartoon and this *Leda.* This is, for instance, the case in the large picture in the Berlin Museum representing *Vertumnus and Pomona* originally, according to Mariette's testimony, accredited under Francesco Melzi's name, and thus, in all likelihood, to be regarded as a work of the faithful follower and pupil

Giovan Pedrino, Kneeling Leda
Prince of Wied. Castle Neuwied

Giovan Pedrino, Abbondanza
Museo Borromeo, Milan

Giovan Pedrino, Mary Magdalen
Marchese Brivio, Milan

Francesco Melzi (?), Vertumnus and Pomona
Kaiser-Friedrich Museum, Berlin

of Leonardo. The Pomona is sitting on a stone under the tree, much as Mary is sitting in St. Anne's lap, but the somewhat more violent movement of the figure carries one's thoughts also to the *Leda.* Melzi's picture also deserves to be particularly noticed in this connection as being one of those which were formerly numbered among Leonardo's mythological pieces. According to Mariette, Melzi's name was expunged from the picture in order that it might pass as a Leonardo, and under this attribution it was in fact during the latter half of the eighteenth century included in the Royal Collections at Sans Souci as a *Flora.*[1] Another picture, probably by Francesco Melzi, which has also passed as a Leonardo and latterly as a Luini, is *La Colombine* in the Hermitage at St. Petersburg.

Francesco Melzi and Giovan Pedrino seem, in fact, to have been the artists who copied and popularized Leonardo's female figures with the greatest assiduity and success. They created a whole gallery of graceful beauties, mostly nude half-figures, smiling and inviting, or smirking and repellent,—according to taste,—which, under the names of *Flora, Abbondanza, La Colombine* and so forth, adorned the stately chambers of many a princely palace and flattered their owners with the false sense of owning a Leonardo. When these pictures were transferred to public collections their reputation suffered serious impairment.

More rarely these nude beauties appear in the full-length figure as in the *Ledas.* This representation constitutes in fact the only impulse which went forth from Leonardo in the sphere of the painting of the female nude. It seems a remarkable fact that he, for instance, entirely neglected the popular *Venus* motive which at that period was cherished with such particular affection in Venice and other near-lying art centres of Northern Italy. When Giovan Pedrino wishes to paint a nude *Magdalen* at full-length he has to fall back on Leonardo's *Leda.* He depicts a winsome smiling beauty sitting in the shadow of a leafy tree and leaning back in complete repose as she indolently takes the air, although the attributes of the penitent sinner, the casket of ointment and the skull, stand before her on the ground. The meaning of the key in her hand is enigmatical. The turn of body and the sideways inclination of the head have clearly

[1] *Cf.* Beschreibendes Verzeichnis der Gemaelde im Kaiser-Friedrich-Museum, No. 222.

been borrowed from the *Ledas;* but the position of the crossed legs comes from another source. For this the young *Bacchus* in the Louvre was evidently the model.

* * * *

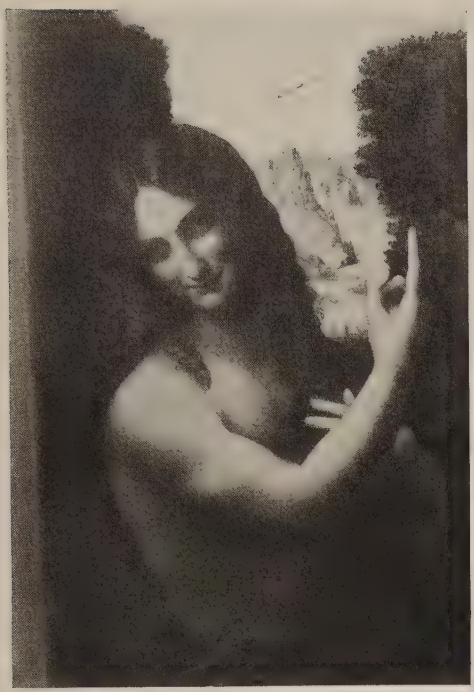
As for the *Bacchus,* it is one of those works in which the name has provoked as much astonishment as the attribution. Why should this youth sitting in solitude on the moss-covered rock, pointing towards some distant object with one hand and in the other holding a long staff, represent the young wine-god? Bacchus does not commonly appear solitary and pensive in Renaissance art! The designation is indeed supported by the chaplet of vine-leaves and the panther-skin over the legs, but these external attributes scarcely affect the real character and original signification of the figure. This is rendered perfectly clear by some Milanese copies of the same composition, for instance, those at San Eustorgio in Milan and in the possession of the Earl of Crawford in England. In these pictures the youth appears without the chaplet of vine-leaves and the panther-skin and the thyrsus is transformed into a cross. It is no longer a *Bacchus* in disguise but a perfectly characteristic *John the Baptist.* As such the young man becomes in pose and gesture quite logical and consistent; he is sitting in the wilderness and points "to Him that shall come." In all likelihood the Louvre picture originally represented John the Baptist and was not dressed out as a *Bacchus* until considerably later. In the earlier inventories, this picture was in fact called a *John the Baptist;* as late as 1695 Paillet names it *St. Jean au desert;* but this title was expunged by a later hand and replaced by "*Baccus dans un paysage,*" with a note in the margin: "est appelé St. Jean dans les anciens inventaires." In later catalogues the picture is called simply *Baccus.* Emil Moeller, who on the basis of F. Engerand's publication of the inventories was the first to point out this circumstance, has arrived at the reasonable conclusion that the Louvre picture must have undergone a drastic recasting at the beginning of the eighteenth century, and was then invested with its misleading mythological disguise.[1]

After these alterations of the original composition, it is, of course, all the more difficult to pronounce an opinion with any degree

[1] *Cf. Monatshefte für Kunstwissenschaft,* 1911, No. XII.

Cesare da Sesto, John the Baptist in the Disguise of Bacchus

Louvre



Salaino(?), John the Baptist
Ambrosiana, Milan

Bern. Lanino, John the Baptist
Lord Crawford, Haigh

Milanese Artist, Beginning of XVI Century, John the Baptist
W. G. Waters, London

Imitation after a Cartoon by Leonardo, Representing an Angel Pointing Upwards
Hermitage, St. Petersburg

of certainty on the authorship of the picture. Leonardo's own hand, at all events, is not to be traced here, although the composition probably goes back to some drawing or cartoon of the master. Among possible authors Cesare da Sesto seems to me most likely as the painter of the figure to judge by the rather full and soft forms. But he certainly did not paint the spacious, romantic landscape, and probably for this part of the picture called upon the aid of his friend, the landscape-painter Bernazzano. The two artists, indeed, collaborated in other cases, as, for example, in the large *Baptism of Christ* in the Casa Scotti at Milan, which in several respects shows resemblances in style with the so-called *Bacchus* in the Louvre.

A picture which has a better claim to be regarded as an authentic work of Leonardo's is the smaller half-length figure of the *Baptist,* also in the Louvre. It is mentioned in the Codice Magliabechiano (*"dipinse anchora un San Giovanni"*), and also in Don Antonio Beati's description of the visit which he paid in 1517 along with the Cardinal of Aragon to Leonardo's studio at Amboise. The picture was thus one of those which Leonardo took with him to France. When it was begun is not known, but Mueller-Walde has given plausible reason for assigning the date to about 1509,[1] for in the Codice Atlantico there is a study for the Baptist's left hand, containing also geometrical calculations which can be dated as of this year. It is possible that the painting was not executed until later on; it shows Leonardo's type of form and modelling in chiaroscuro, and his peculiar psychological characterization intensified to a higher degree than in any other work of the master.

It seems, however, that the *Baptist* was not composed in a single effort, but preceded by another half-length figure partly of the same character although somewhat simpler. This earlier version is known only through a drawing by a pupil in one of Leonardo's sketch-book sheets at Windsor, and by later Milanese copies in the possession of Mr. W. G. Waters in London, of Dr. F. Sarasin in Basel, and in the Hermitage at St. Petersburg. It is not known by any work of Leonardo's own hand whether in drawing or painting. However, it is possible that Leonardo really painted such a picture; for, as has

[1] *Cf.* Mueller-Walde, Beiträge zur Kenntnis des Leonardo da Vinci, III. *Jahrbuch der kgl. preuss. Kunstsamlungen,* 1898.

recently been pointed out by Emil Moeller,[1] the composition entirely corresponds to that mentioned by Vasari: "the angel who lifts one arm so that it is seen in foreshortening from the elbow to the shoulder, while the other is carried with the hand to the breast." So it seems this earlier version was not a *Baptist* but an angel, characterized in the drawing by a wing; but the type and shape remain the same in the *Baptist.*

The pupil's drawing on the sheet in Windsor can be dated in 1506 or 1507, and it is probable that the picture was done at about the same time. While it is thus not quite accurate to talk of two different versions of the *John the Baptist,* it must at any rate be admitted that the earlier one, the *angel,* was a direct preparation for the later one, that is, the *Baptist* proper. The same compositional and colouristic problems were developed in both, although evidently carried to a higher pitch in the later picture. Thus, without any detailed description of the above-named copies from the lost "angel," we may pass on to consider the painting in the Louvre.

The *Baptist,* as a youth, is in half-length, turned half to the right but with his curly head looking towards the spectator and bowed a little to the left. The further hand, which holds the cross, is brought to the breast, while the other points straight upwards, the forearm lying across the chest. The characteristic point in the pose is the accentuated *contraposto* of head and chest brought out still more by the position of the hand in front. One is at once reminded of Leonardo's rule: "Always make the figure so that the breast is not turned in the same direction as the head." The pose is, in fact, so contorted that it cannot be maintained for more than a short time, giving to the figure an effect of momentary action. This is also emphasized by the lighting with its strongly contrasted shadows. The figure emerges out of a mysterious gloom which still envelops and almost entirely conceals the shoulder and the arm holding the sheepskin and the back of the head. The shadows also enter the thick locks of the hair and fall like a veil over the big deep-seated eyes, the

[1] *Cf.* Moeller's article in *Monatshefte für Kunstwissenschaft,* 1911, XII. The author tries here also to vindicate the picture in the Hermitage as an early copy of a lost original by Leonardo, but that is certainly too far-fetched. On my special application, Baron E. von Liphardt, the director of the Gallery, has had the varnish and the repaints removed from the picture and has thus been able to ascertain that the painting was done at the beginning of the nineteenth century.

Leonardo, John the Baptist

Louvre

dimpled cheeks and the smiling mouth. But the nearer shoulder, the lifted arm and the forehead are luminous in pallid flesh-colour, as if under a reflected light. The chiaroscuro is here completely broken, while in the deepest shadow it passes over into darkness. Probably the contrasts are more abrupt than as originally painted, the picture being far from well preserved.

The effective illumination recalls Vasari's words about Leonardo's relief effects:

> It is remarkable how this genius, in his effort to present all his objects in the greatest possible relief, went so far with dark shadows for deep backgrounds that he sought for blacks which might produce deeper shadow, greater intensity than ordinary blacks, thereby heightening the illuminated passages to a still higher pitch. This method at last led him to such dark tones that all light seemed to vanish from his pictures, rendering the darkness of night rather than the clearness of daylight, the purpose being to obtain the highest possible relief and thus attain the final goal and consummation of art.

Leonardo himself repeatedly expressed his opinion as to the right utilization of light, or the "rounding," which he considered to be the essential consideration in painting, and insisted that "chiaroscuro in conjunction with foreshortening is the highest glory of painting." The following reflections from his note-books may also be of interest in this connection: "Shadow is derived from two sources, one of which is bodily (substantial), the other spiritual (elemental). The bodily is the object which is shadowed or casts a shadow, the spiritual is the light. . . . Shadow is a mingling of light and darkness, and it becomes more or less dark according as the light which mingles with it has greater or less force. . . . Betwixt light and darkness there is also something which cannot be called either light or dark, for it participates of both."

Certainly no painter has succeeded better than Leonardo in rendering three-dimensional form on a plane surface, or (if the expression be not misunderstood), in using the medium of painting for visually plastic purposes. His effort to secure ever greater intricacy of form and complete relief is accompanied by a simplification and deepening of the scale of colour. In a picture such as the *Madonna of the Grotto,* Leonardo still employed a number of scattered local tones and flickering reflections; in the *Baptist* the scale of colour is quite neutral, being only black and white with faint intermediate tones in gray and reddish brown. But, as has been said, the

painting is no longer well preserved; its tone has deteriorated owing to the emergence of the reddish ground color. There are also critics who consider that the figure originally appeared against a landscape background which was afterwards painted over,—a hypothesis which seems to us hardly tenable.

The forced smile and expression in this delicate, almost woman-like youth, have been interpreted variously by different authors. There is something of the same enigma here as in the *Mona Lisa,* and it is difficult to find an explanation for the expression in the subject itself. It is no prophetic ecstasy that is reflected in this face, but rather a feminine charm which certainly supports the assertion that Leonardo has represented an androgynous being. If he had appeared without the cross and the fell, he would probably have been christened *Speranza* or *Fede* or some other similar feminine title, which would have made him twice as popular. In any case, Leonardo touched the borderland of the credible in this youthful shape. His interest in the fashioning of an androgynous type of beauty,—fascinating in its mystery and its intellectual charm,—is brought out here more forcibly and convincingly than in any other previous work.

It is natural that this exotic apparition,—in which the master's ideals of style and his psychological curiosity and intent were carried almost to the pitch of exaggeration,—should have possessed a particular fascination for the young men who had fallen under the spell of the Leonardesque art. The picture was copied over and over again, both directly and with minor changes, and the smiling face was also given to figures in quite other connections or situations. The most important copy is doubtless that in the Ambrosiana at Milan, attributed to Leonardo's pupil and assistant, Andrea Salaino, who, we may remark by the way, has not as yet been thoroughly studied. The remarkable thing about this copy is that instead of the dark background it shows a landscape, composed of two *coulisses* of trees on either side of the head, and, between them, a view of a light river-valley with pointed rocks. The dark, curly head of the youth is thus set off by a light ground, while his illuminated side and shoulder are relieved against the dark tree. The contrasts are well calculated; the figure has more of substance but less of mystic charm than Leonardo's youth. If the copy was actually made by Leonardo's faithful follower Salaino, as tradition reports, it is quite conceivable that

the master may himself have advised this alteration in the background, which in other respects, as far as its motives go, agrees with the backgrounds of the *Mona Lisa* and the *St. Anne.*

Passing over other copies, two of which belong to English private collections, one to the Chéramy collection, and one to the Gallery in the Palazzo Rosso at Genoa,[1] we need only add a few words as to the iconographical importance of the Leonardesque *Baptist* to Florentine art. The Baptist, as we know, was the patron saint of the city, and was represented at all ages by local painters and sculptors, most often, perhaps, as a youth, especially during the latter half of the fifteenth century. Busts and statues of the young saint executed by Mino da Fiesole, Benedetto da Majano, and other contemporary sculptors, were, so to speak, daily bread,—at any rate for the artists, —in the Florence of those days. The painters generally introduced the motive into some legendary scene or represented it together with the young Christ, for example, at their meeting in the wilderness. But when a monumental altarpiece was to be made with the Baptist as participant he usually became the severe preacher or the emaciated ascetic of the desert.

Leonardo seems to retain something of the quattrocento conception of the Baptist as a fairy prince and an enthusiastic devotee of nature but detaches him from all legendary connection. His presentation is concentrated into a psychological analysis expressed mainly in the chiaroscuro. His new conception, however, was hardly fertile ground for any artistic evolution in the subject, for later artists were not able to follow him in emotional tone and perfection of form.

Besides the Milanese imitations we may note, finally, Andrea del Sarto's popular half-length of the rapturous but quite mundane young saint (in the Palazzo Pitti), and Bugiardini's *Young Baptist,* sitting on a stone in the wilderness and drinking out of a wooden bowl (in the Bologna Museum). The latter is the sinewy, sunburnt Florentine shepherd boy, the *San Giovannino* of the quattrocentisti become a little more dignified in his bearing and with something of the *grandezza* of the High Renaissance. He is, at least, free from the tendency to morbid sentiment characteristic of the late imitations of Leonardo.

[1] *See* the reproductions in the above-named article of Mueller-Walde.

XIV

LEONARDO IN ROME AND AT AMBOISE

The *Leda* and the *John the Baptist* are the last essays in art that we know by the great artist. They occupied the intervals of scientific research during the later years of the second Milanese period (1508-1513), and were taken to France with the idea, no doubt, of their possible working out to the highest pitch of perfection. But that they were ever finished by Leonardo himself is unlikely; his preoccupation with those problems in natural science which were beginning to enlist some of the best intellects of the time would be quite enough to explain his neglect of painting as a practical craft even if there were no other reasons for it, such, for instance, as his sad experiences in technical experimentation.

It remains for us, therefore, to study the last years of Leonardo's career less with regard to any fresh artistic invention except for the *Leda* and kindred compositions, than as the rounding out of his life in its wider relations, and as helping us to understand his personality.

The four or five years spent at Milan before the French evacuation of Lombardy seem to have been at least free from the distractions of court ceremonial and the utilitarian duties which had hampered Leonardo in Il Moro's time. In Milan he was not exposed to the keen competition and the personal envy which seem to have prevailed in art circles in Florence. There was no Michelangelo there; Leonardo was the esteemed old master who met only with admiration and reverence from the younger generation of artists. His influence was now greater than ever before; most of the numerous pictures,—by known and unknown men,—which generally fall under the designation of "Leonardo's School," are, as a matter of fact, the products of the younger school which was now formed around the venerable teacher. The artistic works on which he was engaged at this time, broadly speaking, determined the trend of style in the whole Lombard school of painting. This has, indeed, been repeatedly called to atten-

tion in the foregoing pages, both with respect to the *St. Anne* and also as regards the *Leda* and *John the Baptist* compositions. They all exhibit the same enigmatic ideal of beauty which was afterwards popularized and rendered hackneyed by Melzi, Salaino, Cesare da Sesto, Giovan Pedrino, and other Lombards.

* * * *

During this second Milanese period Leonardo was assiduously engaged on hydraulic and anatomical studies. It was at this time that he collaborated with Marcantonio della Torre (born in 1482, but already reputed the foremost anatomist of his time), and by the dissection of a number of bodies,—in all over thirty subjects,—made his very important discoveries with regard to the internal organs of the human body. He also continued with enthusiasm his studies on the flight of birds and the problem of the flying-machine which he had commenced during his previous sojourn at Milan and afterwards carried on at Florence. The solution of this problem would mean the supreme triumph of mechanical physics, and in his eyes mathematics was "the noblest and most useful of all sciences," for, according to its laws, all living creatures move. Unfortunately he lacked the mechanical appliances through which the theoretical solution might have been carried into practical effect, and thus his invention became a brilliant experiment in thought of more theoretical than practical value.[1]

Political events, however, soon compelled Leonardo to look about for a new place of residence. Milan once more became the scene of military revolutions. On the 11th of April, 1512, the French lost the battle of Ravenna and their gallant general, Gaston de Foix. In consequence of this defeat their position in Milan became untenable, and Maximilian, Lodovico's twenty-year-old son, made his entry into the city under the protection of the Pope, the Venetians, and the Spaniards (December 29). With the aid of a large mercenary army he succeeded in keeping Milan in his power for a couple of years, but his pecuniary resources soon began to run short, and when the French under Francis I once more invaded Lombardy the young Duke lost the decisive battle at Marignano (September 14, 1515) and was him-

1 A detailed account of Leonardo's studies on the problem of flying has been given by the author in the *Nordisk Tidskrift*, 1910.

self taken as a prisoner to France. Leonardo could have expected little from Maximilian under the disturbed conditions and after waiting about a year in hopes that the political horizon might clear he was compelled to search for a new patron. As to the next few years of his life Vasari supplies the following information:

He went to Rome with Duke Giuliano di Medici, at the time of the election of Pope Leo, who spent much time on philosophical studies, and particularly on alchemy. There Leonardo formed a paste of a certain kind of wax with which he made small animals which he filled with air by blowing into them and made them fly when he was out walking, but when the wind ceased they fell to the ground.

On the back of a most curious lizard which had been found by the vine-dresser of the Belvedere, he fixed, with a mixture of quicksilver, wings composed of scales stripped from other lizards so that they quivered as the lizard moved. Then he gave it eyes, horns and a beard, tamed it, and kept it in a box. All the friends to whom he showed it ran away in fear.

He used often to have the intestines of a wether completely freed of their fat and cleansed and thus made so thin that they could be contained in the palm of the hand. In another room he put up a bellows, to which one end of the intestines was attached. The air was pumped into them so that they filled the whole of the large room and all who were in it had to retreat into the corners. Thereby he showed them how these intestines, which to begin with took up so little room, when distended so that they were quite transparent required a large space, likening them to virtue.

He made an infinite number of such follies; he likewise studied mirrors and tried strange methods for producing oils for painting and varnishes for preserving his works.

He painted at this time, with incredible care and skill, a little picture of the Madonna with the Child on her arm, for Messer Baldassare Turini from Pescia who was datary to Pope Leo. But the picture is now in very bad condition; due, perhaps, to whoever primed the panel with gesso, or, possibly, to his many and capricious mixtures of grounds and colours. In another small picture he made a portrait of a little boy,—a wonderfully beautiful and charming work; both of these are now at Pescia in the possession of Messer Giulio Turini.

It is related that once, when he had been commissioned by the Pope to execute a certain work for him, he began by distilling oils and herbs for the varnish at which Pope Leo exclaimed: "Alas! this man will never accomplish anything, for he begins by thinking of the end of his work before he has even made a beginning on it."

There was unquestionable antipathy between Leonardo and Michelangelo, and when the latter, with permission of Duke Giuliano, departed from Florence (to Rome), declaring that he had been summoned by the Pope for work upon the façade of San Lorenzo, Leonardo, understanding the significance of the step, determined to leave Rome and betook himself to France, where the King, who already possessed some of his works, was very much devoted to him and desired that he should execute in colour the cartoon for the St. Anne, but this Leonardo in his usual way put off for a long time with promises.

Leonardo's arrival in Rome did not take place precisely in connection with the election of Leo X (May 11, 1513), but was not very long thereafter. We read in his note-books: "I departed from Milan for Rome on the 24th of September, 1513, with Giovanni and Francesco de Melzi, Salai, and Lorenzo, il Fanfoja." His new patron, Duke Giuliano de Medici, the brother of the newly elected Pope, had given him the disposal of an apartment in the Belvedere of the Vatican. He seems, however, to have experienced considerable annoyance from persons who also had their workshops in this part of the Vatican. Thus he mentions a German mechanic, called Giovanni degli Specchi, who, envious of Leonardo's superior skill in all kinds of mechanical work, tried to hinder him in many ways and traduce him to those in power. "This man," Leonardo writes, "has hindered me in my studies in anatomy, calumniating me to the Pope and likewise at the hospital, and has filled the whole Belvedere with workshops for mirrors and workmen. He has done the same thing in Messer Giorgio's rooms." Maestro Giorgio was a mechanic who assisted Leonardo in his physical work and experiments.

"On the 9th of January, 1515, at sunrise," records Leonardo, "the highly honoured Giuliano de Medici left Rome in order to go to Savoy for his wedding. On the same day we received news of the death of the king of France [Louis XII]."

Giuliano de Medici, Duke of Nemours, married Philiberta of Savoy, a sister of the Queen of France who had recently become a widow and whose young son now ascended the throne under the name of Francis I. Undaunted and thirsting for glory, the young King did not hesitate long before forming a coalition against Milan and marching across the Alps at the head of a powerful army. The result has already been told. Duke Maximilian's resistance was quite fruitless; he was compelled after a two days' battle to disclaim all title to the throne and was carried in honourable captivity to France. He died in Paris in 1530.

Some authors,—foremost among them Edmondo Solmi,—hold that Leonardo was present first at King Francis I's entrance into Milan in September, 1515 (where, they say, he arranged the festal decorations), and then at the solemn meeting of the King and the Pope at Bologna on the 11th to the 15th of December of the same

year. In this case he must have accompanied Duke Giuliano, when the latter marched off (in July) at the head of the papal army, in order to assist Maximilian against the French and the Venetians. Giuliano, however, did not get further than Florence, where he fell ill and was obliged to retire. Leonardo writes to him and speaks in the letter about the Duke's health and recovery from his illness, which he would scarcely have had occasion to do, if he had accompanied Giuliano. (*Cf.* Richter, No. 13517.) Under these circumstances it seems most probable that the artist stayed for the time being in Rome, in spite of all his troubles with interfering artisans. In fact, down to Duke Giuliano's death, on the 17th of March, 1516, he was nominally in his patron's service and could hardly have left Rome without a special summons. According to a note, he made measurements of the Basilica of St. Peter's in August of the same year (*cf.* Seidlitz, p. 177), but soon afterward he must have repaired to Milan, and then,—perhaps in the same autumn,—to France.

The antipathy between Leonardo and Michelangelo, mentioned by Vasari in the foregoing passage, doubtless also contributed to embitter Leonardo's later years in Rome, although it really proceeded from long before. It seems hardly likely that the simultaneous presence of the artists in Rome was occasioned by Michelangelo's commission for the façade of San Lorenzo, for the design was not submitted to the Pope before September, 1516. Leonardo had then already left the city.

The little pictures which Vasari declares Leonardo to have painted for Baldassare Turini are completely lost. However, it is not improbable that they really existed. Turini was a well-known patron of art; he was responsible, for instance, for the building of the Villa Lante on the Janiculum which was decorated with frescoes by Giulio Romano.

The journey to France, as we have said, was made towards the end of the year 1516, or in the beginning of the following year. Leonardo was accompanied by his young friend and admirer, Francesco Melzi, and his servant, Battista de Villanis. The King, who was greatly charmed by the personality of the venerable artist, had put at his service a princely residence in the Castle of Cloux and a yearly allowance of 700 scudi. Cloux, situated in the vicinity of Amboise,

is one of the royal pleasure castles and hunting lodges where the court at that time was often held. Leonardo probably once more had occasion to display his ability as a festal decorator. It has even been conjectured that he was engaged in architectural work. But he seems also to have had time to engage in practical engineering, for he projected a grand canal scheme which was to connect Touraine with Lyons and not merely serve to facilitate traffic, but also to irrigate the district. The canals which in later times were constructed in this district are said to have conformed in the main to those planned by Leonardo.

A graphic description of the aged Leonardo at Cloux is contained in the *Travels* of Cardinal Luigi of Aragon, which were written down by his travelling companion Don Antonio Beati.[1] These august personages paid a visit to Leonardo which is described in the following manner:

> On the 10th of October, 1517, we travelled from Tours to Amboise. In one of the suburbs we went to visit the Florentine Lunardo Vinci, an old man over seventy years of age [in reality Leonardo was only sixty-four years old], the most eminent painter of our times. He exhibited to His Excellency three pictures, one of them representing a certain Florentine lady, painted from nature at the desire of the late Giuliano Magnifico de' Medici. The second represented John the Baptist as a youth; the third the Mother of God with her Son sitting in the lap of St. Anne, all consummate. Now good works of art can no longer be looked for from him for a certain paralysis has seized his right hand. He has trained a Milanese, who works pretty well, and although the said Messer Lunardo is no longer able to colour with his former delicacy, he can nevertheless execute drawings and impart instruction to others. This noble man has drawn up an extraordinary treatise on anatomy, giving demonstrations in drawings, not merely of the extremities and the muscles, but also of the nerves, veins, joints, intestines, and whatever can be demonstrated at all, both in male and female bodies, in a manner which has never yet been done by anyone. All this we have seen with our own eyes, and he himself said that he had dissected over fifty bodies of men and women at different ages. He has also written on the nature of water, and on various machines and other matters,—an endless number of volumes, all in the vulgar tongue, which, if they were published, would certainly be very instructive and readable.

The last two named paintings, *John the Baptist* and the *Madonna with the Child and St. Anne,* are, as we know, now in the Louvre; on the other hand, we know nothing as to the portrait of the lady which he is said to have executed for Giuliano de Medici. Possibly

[1] Manuscript now belonging to the Naples Library.

this statement of Beati's is due to a misunderstanding; the portrait was perhaps that of *Mona Lisa,* which, like the two pictures mentioned above, seems to have accompanied Leonardo to France.

* * * *

Finally he grew old and remained ill for many months. When he felt that death was approaching he desired to be duly instructed in the doctrine of the Catholic Church and the holy Christian religion. Then he confessed himself, with tears, and reverentially received the Holy Sacrament, for which purpose he left his bed although he could not stand on his feet but had to be supported by friends and servants. The King, who used often and lovingly to visit him, then entered the chamber, whereat Leonardo out of respect sat upright in his bed and gave an account of his sickness and its attacks, also lamenting how much he had offended God and man by not working in his art as he ought to have done. Thereupon he was seized with a terrible paroxysm, —the harbinger of death. The King rose and propped up his head to help him and show him his favour, hoping thereby to alleviate his suffering. His divine spirit, knowing that it could aspire to no greater honour, then left him in the arms of the King. He was seventy-five years of age.

This affecting description of Leonardo's death is one of those romantic flights of fancy with which Vasari loves to embroider his biographies. We know as a matter of fact that King Francis was present at the birth of his second son at St. Germain-en-Laye at the time when Leonardo (on the 2d of May, 1519) drew his last breath at Cloux. It is also noteworthy that in the last edition of his "Vite," Vasari entirely expunged the allusion to Leonardo's agnosticism which appeared in the first edition. The first version is that Leonardo shortly before his death disputed about the Catholic faith, but at length found the right way and submitted, with tears, to Christianity. The difference is in any case more instructive (and discreditable) as regards Vasari than Leonardo, who, whether he received the sacrament or not on his death-bed, all his life through served art and science independently of all ecclesiastical dogma.

"Thou, O God, dost sell us all good things for the price of work."

"Necessity is the primæval thought and inventor of Nature, its rein and eternal rule. . . ."

On the 23d of April, 1519,—"before Easter" (according to the French chronology of the year 1518, as the beginning of the year was reckoned from Easter),—Leonardo, "in view of the certainty of death and the insecurity of the present hour," sent for a notary to draw up his will. He commends his soul "ad nostro Signore, Messer Domine

Dio," and to "all the holy angels" and "the saints of Paradise." He expresses a desire to be buried in the Church of San Florentinus at Amboise with all the pomp which those about him might deem fitting for the King's painter; he makes arrangements for the ceremonies and masses for the soul according to the custom of the times. Then he bequeaths to "Messer Francesco Melzi, nobile of Milano, in compensation for all his services during the past years, all the books in the testator's possession together with all instruments and notes (*portracti* seems to be a slip for *tractati*) relating to his art and his profession as a painter." To Salai and Battista de Villanis, both of whom he calls his "servitors," he leaves his vineyard outside Milan, which he had received as a gift from Lodovico il Moro; to his own brothers he leaves the 400 scudi which had been deposited in the bank of Santa Maria Nuova and his vineyard at Fiesole. To an old female servant he leaves a cloak lined with fur and two ducats; to Francesco Melzi his clothes and what was still due to him of his pension.

On the first of June Melzi wrote to Ser Giuliano da Vinci and his brothers: "I presume that you have already received the news of your brother Maestro Leonardo's death. He was to me like the best of fathers and it is impossible for me to express the grief which his death has caused me. As long as my body holds together, I shall feel perpetual unhappiness and this with good cause for he showed me daily the warmest, the most unbounded love. Everyone must regret the passing away of such a man, for it is not in the power of Nature to bring forth his peer. May God grant him eternal peace! He departed this life on the 2d of May, well prepared for death with all the consolations of Holy Mother Church. . . ." Had the King been present Melzi would scarcely have failed to mention the fact.

Leonardo was buried at Amboise on the 12th of August, 1519.

The best funeral oration over the great man and indefatigable worker will be found in his own words: "As a well-spent day brings happy sleep so life, well used, brings happy death."

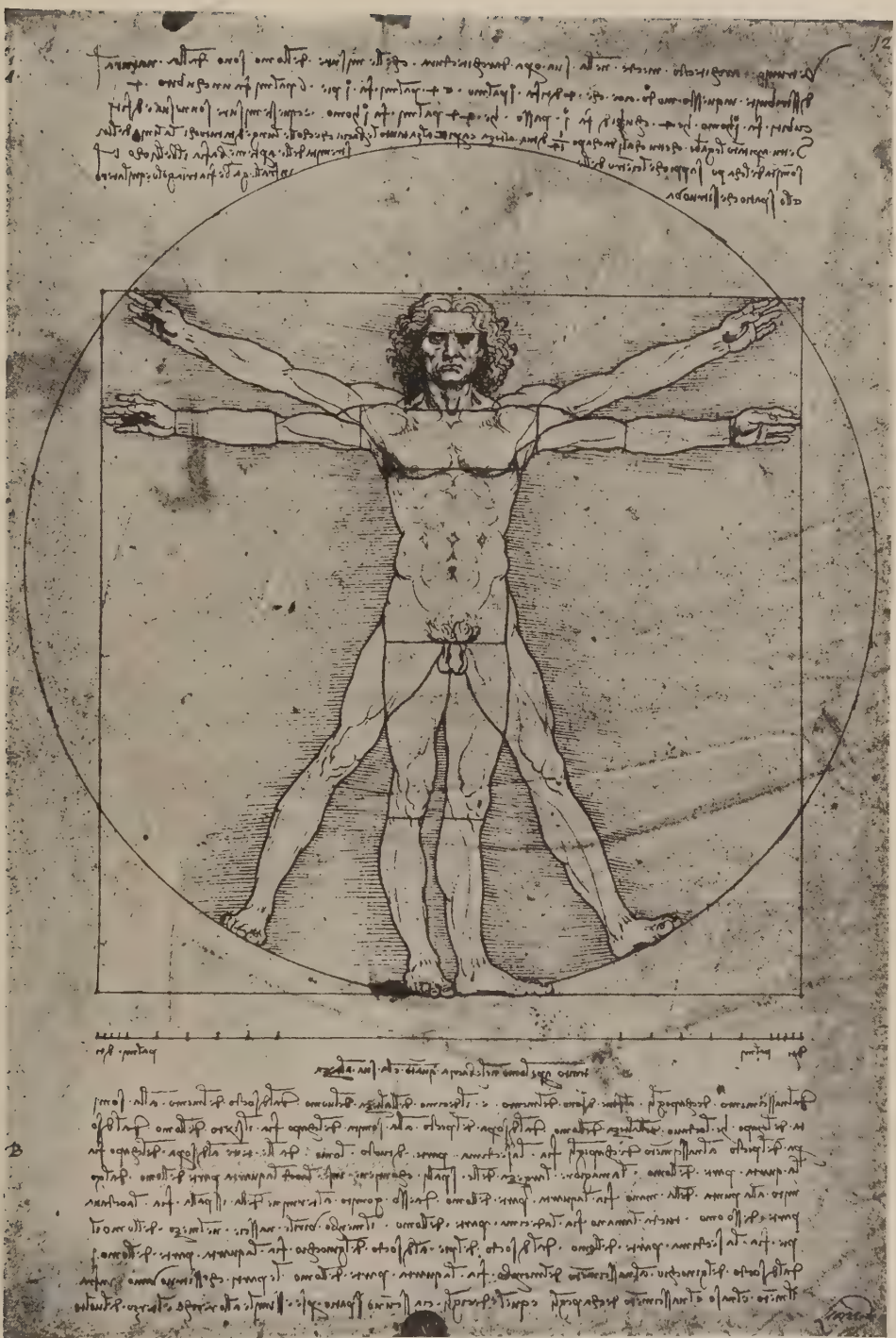
XV

A SKETCH OF LEONARDO'S PERSONALITY, CHARACTER, AND VIEWS OF LIFE

I

All old writers commenting upon the impression made by Leonardo upon his contemporaries lay stress on the imposing effect of his external personality, his appearance and bearing. His prophet-like figure, the dignity of his demeanour, his composed gestures, the rich sound of his beautiful voice, the superiority of his whole nature seem to have exerted a charm and made an ineffaceable impression upon all, whether high or low. "With the radiance of his glorious appearance he refreshed every troubled soul, and with his words he turned to yea and nay every obdurate intention. He was so strong that he could resist the most violent outbursts of rage and with his right hand he could twist the iron ring of a door-bell or a horseshoe as if it had been of lead. Extremely generous, he was ready to espouse and support the cause of any friend who possessed talent and worth. His every action lent beauty and honour to the place of his habitation no matter how mean the dwelling. Florence in truth received a precious gift in the birth of Leonardo and suffered an immeasurable loss in his death." Thus writes Vasari. And the author of the so-called "Codice Magliabechiano" says that Leonardo seems to have been brought forth by a miracle of nature, as was proved by his physical beauty as well as by his rare spiritual gifts.

Giovan Paolo Lomazzo,—who, even if he never saw Leonardo himself, was at all events acquainted with the master's faithful follower Francesco Melzi,—writes in his "L'idea del tempio della pittura" that Leonardo's face with the long hair, the beard and the bushy eyebrows, looked the very incarnation of noble intellectual



LEONARDO, SCHEMATIC DRAWING OF A MAN OF PERFECT PROPORTIONS

ACADEMY, VENICE

toil, as did in former days the Hermes or the Prometheus of the ancients.[1]

We know this face from the red-chalk drawing at Turin, which Leonardo himself executed with all the precision of touch and all the vigour which he alone could bestow upon a human countenance. Mighty soul struggles have furrowed the high forehead, bitter experiences and suffering are revealed in the hard line over the mouth, penetrating keenness of vision is written in the deep searching gaze. It is the face of a man who has evidently not experienced happiness alone in his contact with the world and with his fellow-men, but, at the same time, one who has had courage and force to conquer all obstacles which it is in human power to overcome. Now in his advanced years (he looked far older than he really was), a feeling of inward peace seems to have soothed away all strife and bitterness. In the features and the expression the prophet has gained the ascendency over the fighting Titan—it is a "Hermes" rather than a "Prometheus."

As to Leonardo's appearance in other respects, in his figure and bearing, we read in the "Codice Magliabechiano" as follows: "His was a stately figure, well-proportioned and lithe with a beautiful countenance. He was usually clad in a pale red tunic which was cut at the knees although long garments were then in vogue. He wore a long beard which reached half-way down his breast, curly and well trimmed."

When we learn that Leonardo did not trouble to follow fashions, in dress, we are reminded of his words in the "Treatise" in which he ironically says that garments in his youth were "cut out at the top, bottom and sides"; that they "had such high collars that they covered the whole head, and then again were cut so low that the shoulders were left bare." "At another period, again, the garments became so long and trailing that they had to be carried over both arms in order to avoid trampling on them, and then they were made so short that they only reached to the hips and the elbows and so tight that they impeded the movements and often burst." It seems as if Leonardo had even in his dress striven after a certain dignity and freedom from extravagance. In the introduction to his "Treatise on Painting" he points

1 The same author writes in another place: "Leonardo had received from the sun the faculty of fashioning all that the human understanding has ever been able to conceive or imagine within the seven liberal arts."

out particularly that the painter, even in his work, must be well dressed, for he need not fear, like the sculptor, to be covered with marble dust and slag. The brush is a light and clean implement, and the painter's dwelling should be clean and bright and adorned with pictures.

When we endeavour to form a conception of Leonardo's personality it is naturally the man in his maturity, the great artist and scientist, that our thoughts summon up;—we do not always reflect that Leonardo, like all men of many-sided talents, passed through a long internal and external development before the high values which lay latent in his nature were wrought out into full clearness. The almost unlimited possibilities which mark Leonardo's personality naturally offered points of contact with the most varied spheres of human activity, and it is not to be wondered at that Leonardo appeared to his contemporaries wayward and inconstant, as is indicated by Vasari. The great governing lines in his nature and many-sided activity emerged into prominence only in the course of the years, and became fully perceptible only to succeeding generations. He had doubtless to undergo much of struggle and of suffering before he attained the intellectual clearness and firmness which incontestably are the mark of the mature personality. But it should be noted that, whereas other artists generally expend most of their energies in the struggle against their supposed external enemies and circumstances, Leonardo turns the weapons of his will and his striving against the foe within and fights out his hardest battles in silence. His severe ethical standard and his capacity for self-conquest are brought out clearly in his writings, as will be set forth in the following pages.

The profound development of character which Leonardo manifestly underwent can only be surmised, not clearly presented to view, owing to the very scanty historical data and traditions which at present are at our disposal. The purely biographical materials as to his childhood and youth are extremely sparse. It seems, however, to be beyond all question that the shadow of his illegitimate birth was of more material consequence to the young Leonardo than the analogy of similar cases might lead one to expect. It tended to isolate him both from his family and from influential social circles and princely patrons. In his youth he perhaps found a certain compensation for this seclusion in the gay, light-hearted life which was led in the

Florentine artists' studios. His radiant beauty, the charm of his manner, his rich gifts, were bound to procure him a recognized position among his fellow-artists,—he could be irresistible when he pleased,—but it seems as though he did not permit himself to be ensnared by custom and tradition in life any more than in art. His nature demanded a certain seclusion and independence, he felt most satisfied when he was left alone, "entirely by himself." Nor does Leonardo seem to have conceived any real affection for Florence as his native city. He had undergone too many bitter experiences there,—met with too much Philistine envy and ill will from the self-assured Florentines,—not to cherish a certain rancour against them even in later years. It cannot be without just cause that he turns on his fellow-countrymen with the exclamation: "When I made the little Christ you put me in prison, and if I now should make him big you would do something still worse to me." ("Quando io feci Domeneddio putto voi mi metteste in prigione, ora s'io fo grande voi mi fareste peggio.")

The allusion to Leonardo having been in prison[1] has been connected with the previously mentioned accusation for unnatural crime, which, however (if we abide by the scant notices in the documents), was never definitely proved. The matter is for the present enveloped in obscurity and must so remain until clearer documentary evidence is discovered. The tone of petulance which rings in the artist's own exclamation of course does not necessarily show that he was innocent, particularly if we consider the morals of the time. The vices which have been alluded to were the seamy side of the antique culture which sprang up in Florence during the later half of the fifteenth century, and by the artists and enthusiasts for antiquity they were judged quite differently than they are in our days. Knowledge of ancient Greek life and of the Platonic eros was still so superficial that the slag of the period of decadence was often accepted as gold along with the great enfranchising ideas.

In what measure the artistic production of Leonardo's earlier years affords evidence in one direction or the other cannot be decided here; it need only be pointed out that hitherto not a single passage in his notes and sheets of studies has been discovered which contains proof of any erotic suggestion. Though Leonardo records with re-

1 *Cf. Archivio Storico Lombardo,* Series IV, Part XVI.

markable minuteness matters relating to men-servants and pupils, the only women whom we light upon in his notes are his step-mother, an old female servant, and the great princesses upon whose account he worked in Milan and Mantua. We do not come across any "incognita" or anyone who is mentioned in a tone of longing or passion. And yet the artist's own productions testify that he understood better than almost anyone else how to interpret the most subtle charms and the most variable moods in a woman's soul. But in Leonardo's studies of women hardly a touch of sensuality is perceptible; it is the bright intelligence, the psychic *charis,* in these radiant young women that seems to have fascinated the artist and to have inspired him in his delicate and subtle poems in painting. Many of these girlishly slender beings might almost as well be youths, or, at any rate with slight change, play male parts as well as female. The reader may be referred, for confirmation, to the early Madonna studies and to a couple of allegorical drawings at Oxford. The boundary line between the sexes, or rather between the youths and the young girls, is surprisingly little marked in Leonardo's studies; in certain cases it vanishes as, for instance, in the figure of John the Baptist in the Louvre.

The explanation is perhaps to be sought to some extent in the artist's subjective psychical life, his remarkable freedom from the restrictions of the objective world. He lived so intensely the life of the imagination that he never allowed himself to be carried away by the sensuous sorrows and joys of life. Many of his projects and inventions are sheer flights of fancy, launched without the slightest heed to material limitations. Thus some of his engines of war and his flying machines were theoretical solutions of certain mechanical problems realizable only on paper and in the imagination. Not only were wonderful machines and instruments produced in this manner, but weird fabulous monsters, fashioned into organic beings out of heterogeneous parts borrowed from different animals, often floated in his imagination impelling him to give them expression both in drawing and in painting. These strange hybrid creatures seem actually to have won him a certain fame (according to the traditions Vasari has handed down to us), and it would certainly be unfair to Leonardo to look upon them merely as artistic conceits without any deeper foundation in his personal views of life. He did not confine himself to the

pictorial representation of these composite fabulous creatures; he appears also to have made experiments with living objects in a similar manner,—for instance, when the curious lizard which was found by the gardener in the Belvedere was furnished with movable, quivering wings.[1] In this sphere, too, one perceives Leonardo's endeavour to transcend or efface the limitations of nature, and to create something which should combine the best features of different beings in a higher organic unity. Both as artist and as scientist his attitude toward nature is not merely that of pupil but also that of competitor. He desires not merely to study and to copy, but also to transform and create anew according to the ideal of his imagination. The spiritual power which he commands is so mighty that it seems as though in inspired moments he could, in a certain measure, render himself independent of human limitations and methods of working. He sees the ideal image, he makes a sketch, he indicates the manner and the means for its attainment; further than this he seldom reaches, be this due to his discovering the impracticability of the idea, or to the analytical bent gaining the ascendency over the artist's creative *psyche* and enticing him into detailed investigations which carry him far away from the central original problem.

We know how his artistic activity impelled him to profound study in anatomy, mechanics and optics; how, in his endeavour to reproduce nature with the greatest possible fidelity, he became a botanist and a geologist. He combines, compares, and draws conclusions in these domains without regard to anything but the empirical material before him. The solution of the problem, the explanation of the natural phenomenon, then serves him as a foundation for his scientific work. He not merely desires to gain firm standing ground by working according to the same principles which govern Nature's activities, but to proceed a step further in the same direction and fashion creatures having no recognized form. The result in such cases is as much due to the curiosity of the scientist as to the intuition and imagination of the artist.

When we endeavour to trace Leonardo's personality through varying vicissitudes and political convulsions, it sometimes looks as

1 Since then huge flying lizards have been found as fossils, and are now well known to all visitors to the great museums.

if he led a life apart, immersed in scientific research and unaffected by the events that entered deeply into the life of his contemporaries.

Thus, for instance, Savonarola never obtained power over his mind. That passionate, penitential preacher who, with his denunciations and threatenings, and hatred of all earthly beauty and joy, for a time paralyzed the gay life in the city on the Arno, and constrained artists like Botticelli and Fra Bartolommeo to temporary silence, was to Leonardo scarcely more than an infatuated fanatic, whose misdirected zeal excited his commiseration rather than his sympathy. Unable to comprehend, and incapable of being stirred by the monk's zealous desire to annihilate all sensuous forms of beauty, Leonardo could not respond to his appeal, and, in the struggle between debased sensuality and hysteric asceticism, stood far away on the free altitude of superiority. Savonarola's coarse, sharply marked features served Leonardo as a basis for studies of facial caricature, which indicate the feeling of aversion which the monk seems to have evoked in the artist.

Other notable personages of the time appear to have made a more advantageous impression on Leonardo and to have exercised greater influence on his development, but it may be questioned whether, at bottom, they were more congenial to him or found a place nearer his heart. Foremost among them were Lodovico il Moro and Cesare Borgia. Lodovico, as we have seen, was for many years Leonardo's princely patron, and in this capacity probably showed himself in the most favourable light, but he never seems to have been able to win the artist's personal affection, as is best evinced by the unmoved tone in which Leonardo records the overthrow of the Duke.

Cesare Borgia was a character of tougher fibre, a man whose wild beast instincts marked him off from the multitude, though he certainly could be imposing when he thought fit. His enterprises afforded Leonardo the greatest possibilities for practical experiment and inventions. In the capacity of architect of fortifications and military engineer to this enterprising general he had opportunity to test and put into practice many theoretical ideas which he would otherwise not have been able to carry out; he evidently availed himself of this chance without troubling about the Duke's personal qualities or political plans. When the tyrant's brief spell of power came

to an end Leonardo quietly proceeded with his technical work in another quarter.

The political circumstances of the time were a tangle of intrigues, treacheries, and massacres. Crass selfishness and rapacity were the governing principles. A man who wished to pass as a good patriot and to have a fling in the arena of politics must give free rein to his passions and develop in himself something corresponding to the rapacity of tyrants and the fury of the unchained populace. This was not to Leonardo's mind. It was not in him, as in Michelangelo, to burst into flame and become the active politician fired with patriotic hatred to tyrants. His serene view of life, his feeling for harmony and scientific objectivity seem, to a certain extent, to have isolated him from the political struggles and intrigues of the times.

We have already touched upon the fact that Leonardo often appears to have lived entirely absorbed in the subjective world of ideas. There is a certain degree of truth in the statement of a modern author that he viewed circumstances,—and things political in particular,—"sub specie æternitatis." But it should be remembered that this point of view was determined by his creative genius and not by any external powers and influences. His independence of political vicissitudes—explicable from his position as an artist—is illustrated by the history of most of his works.

It may be recalled how work upon one equestrian statue followed without intermission upon that on another. The order from Lodovico for the first of these was the occasion of Leonardo's going to Milan, but the fall of the Duke prevented its completion. A commission from the conquèror of the Duke for a similar monument was to Leonardo merely a welcome opportunity to proceed in the same direction. It was not the apotheosis of the commander that interested him, but the artistic thought, the monumental problem of the statue. Likewise with his canal works in Lombardy. Commenced under Duke Lodovico, they were continued under the French government; the political convulsions did not affect these works. Leonardo felt them to be for the benefit of the population that inhabited and cultivated the district, and saw his opportunity to put into practice some of his calculations in hydraulics and engineering science. In his hours of study he was engrossed with investigations, experiments, and other technical matters. The results were developed quietly with the aid of

incessant observation, and when external circumstances afforded suitable opportunity he availed himself of them without regard to political upheavals.

The genius was absorbed in his work, the inventor in his science, and neither success or personal advantage to himself nor the ultimate object of the work in hand was what appealed to him. He felt that he was organizer and director,—as to the practical execution of the task, that was a secondary consideration,—"servant's work."

II

It was extremely characteristic of Leonardo's whole nature, and his double capacity of artist and scientist, that he designated the eye as "the window of the soul, and the principal channel by which the central sense (commune senso) can gain rich and complete knowledge of the infinite works of Nature."[1]

"If you—historians, poets, and mathematicians—have not seen the things with your own eyes," he exclaims, "you cannot delineate them properly in your writings! Those who only study the ancients and not the works of Nature are step-sons, and not sons of Nature, the mother of all good authors."

The eye of the artist and the eye of the scientist were in fullest measure combined in Leonardo; with him they were not merely perceptive organs, but also formed a positive force enabling him to penetrate to a living conception of the inner character and connection of phenomena. It was this inner eye, at once clearly defining and intuitively piercing, which revealed to him the orbits of the spheres, and the tiniest of nature's organisms. Most of what he has discovered and recorded in different branches of science, is a fruit of that rare faculty of rightly using the inner and the outer vision; and that this was the case with his artistic production need scarcely be pointed out. As an illustration of how Leonardo used his eyes as an aid in his interpretation of nature we may recall his explanation of the occurrence of shells and fossil aquatic animals in mountains remote from the coasts.

[1] Richter, "The Literary Works of Leonardo da Vinci," Vol. I, No. 653. In order to avoid burdening this account with continual references, I desire to point out once and for all that the quotations from Leonardo's manuscripts given in the following pages will be found, with some few exceptions, in the original tongue in Richter's work.

If you say that the shells which are to be seen in our days within the confines of Italy, far away from the sea and at great heights, were left there by the Flood, I reply that,—granting that the Flood rose seven cubits above the highest mountains (as he that measured it has written), then the shells, such as are always to be found near the shore, ought to be found lying on the mountain sides and not at so short a distance above their bases, nor all at the same level, layer upon layer. . . .

Leonardo then proceeds to meet further objections with regard to the creation of the shells and so forth, and shows how the rivers deposit great masses of shells and water animals which become petrified. "Great quantities of shells are to be seen in places where the rivers fall into the sea because the water is not so salt there in consequence of its mingling with the fresh water. Evidence of this is to be seen where, of old, the Apennines poured their rivers into the Adriatic Sea; for there in most places great quantities of shells are to be found among the mountains together with bluish marine clay, and all the rocks which are torn off in such places are full of shells. The same may be observed to have been done by the Arno when it fell from the rock of Gonfolina into the sea which was not very far below; for at that time it was higher than the top of San Miniato al Tedesco, since at the highest summit of this the shores may be seen full of shells and oysters within its flanks."

These geological investigations might easily be supplemented by others from the provinces of mechanics, anatomy, botany, and other sciences but, as it would carry us too far to give samples of everything, the above passage must serve as a representative specimen of Leonardo's faculty of observation and deduction. He never stops at the phenomenon; he does not content himself with the collection and establishment of external facts; he goes further and strives to formulate the governing principles, just as in art he condenses his studies of nature into the ideal compositions which rise before the intuitive creative vision. The material of experience serves as stuff for the structure erected by genius.

In most convincing words Leonardo has formulated his high estimate of experience as a means of knowledge:

Experience is never at fault; it is only our judgment that is in error, in promising itself things that are not within its power. Wrongly do men cry out against experience and with bitter reproaches accuse her of deceitfulness.

Let experience alone and rather turn your complaints against your own ignorance, which causes you to be so carried away by your vain and insensate desires as to expect from experience things which it is not within her power to supply!

It is with the aid of experience and experiment that all questions of detail must be investigated before the general laws of great compositions are formulated. Experiment is called "the interpreter between Nature and Man," and Leonardo insists that before an instance is propounded as indicating a law one must ascertain many times over by experiment that it always yields the same results.

Leonardo's "experience," however, is something different from the witness of the five senses. It is not confined to external impressions, but includes an inductive activity which really means that he "sees" and "experiences" in a far profounder way than the majority of mankind. It has been said that, where others *see* Leonardo *contemplates*. In other words, where others observe an accidental phenomenon, Leonardo discovers a law of nature,—he sees it intuitively, and verifies it by experiment. All this is embraced in the term "experience." The scientific intuition is the leading force; when it has assigned the goal and the direction an analytical method of investigation is applied.

It is quite fruitless to endeavour to limit Leonardo's method to any kind of scientific positivism; for from time to time we light upon utterances in his manuscripts that point in another direction. Thus he writes in one place: "All our knowledge (or discernment) has its origin in the feelings" (ogni nostra cognitione principia da sentimenti). He is evidently referring to that discernment or intuition which freely avails itself of the material of experience, and the "feelings" stand, no doubt, for the manifestations of the higher spiritual unity which Leonardo finds in man. Another time he writes: "The senses are earthly; reason stands over them in contemplation."

The highest and purest form of human knowledge Leonardo found in mathematics. It falls to the mathematician to diffuse light over the darkness of ignorance, and over the illusions which arise from the warping of judgment by passion and emotion. "And thou, human ignorance, dost thou not see,—notwithstanding thou hast consorted with thyself all thy life,—the thing of which thou art most richly possessed, namely thine ignorance? With the throng of the

Sophists thou deceivest thyself and others, despising the mathematical sciences which contain the truth and the real knowledge of things. And then thou runnest after miracles, and claimest to possess knowledge of things which do not lie within man's power of comprehension and cannot be proven by any example from nature. Thou dost imagine that thou hast performed miracles when thou hast spoiled the work of some speculative spirit (Opera d'alcuno ingegnio speculativo)! Thou dost not see that thou art guilty of the same mistake as a man who lops a tree of its branches bearing leaves and sweet-scented blossoms."

Leonardo had doubtless often enough come into painful contact with that narrow-mindedness and infatuation in men which allows them to be deceived by musty authorities and uncompromising tradition rather than rely upon their own powers of reasoning. Both the Church and Humanism encouraged this attitude. Leonardo has let fall more than one remark that shows what an independent position he assumed both towards the doctrinaire subservience of the Humanists and towards the ecclesiasticism of the priests and monks.

I am fully aware that the fact of my not being a man of letters may cause certain arrogant persons to think that they may with reason censure me, alleging that I am a man ignorant of book-learning. Foolish folk! Do they not know that I might retort by saying, as did Marius to the Roman Patricians, "They who themselves go about adorned in the fruits of the labour of others will not permit me the use of my own." They will say that because of my lack of book-learning I cannot properly express what I desire to treat of. Do they not know that my subjects require for their exposition experience rather than the words of others? And, since experience has been the mistress of whoever has written well, I take her as my mistress and to her in all points make my appeal.

A man who disputes and appeals to authority does not use his judgment, but his memory.

The monks he called Pharisees, and he is evidently referring to them when he writes: "And many have set up trade with deceptions and false miracles with which they deceive the credulous multitude."

If, on the strength of certain passages in the first edition of Vasari's biography and his later reflections on Leonardo's free-thinking propensities we are inclined to blame him for lack of interest in religion, we must bear in mind that it was only the religion of the dead letter and dogmatic theology which he shunned. He considered

it a sheer waste of time and trouble to engage in scholastic subtleties. "I leave the crowned [sacred] books alone, because they contain the highest truth," he says, and questions such as the definition of the soul he leaves to the "friars, those fathers of the people who by inspiration know all mysteries,"—a remark which is not without an ironical ring when it is read in connection with what Leonardo said elsewhere about the monks. For his own part, he contents himself with indicating the relation of the soul to the body, its proper significance to man. "If you would know in what state the soul is that dwells in the body, you should mark how that body uses (or gives expression to) its daily inmate."

Leonardo found his true religion in his daily worship at the shrine of Nature, where, as a scientist and artist, he strove to understand and explain everything and whence he drew his inspiration for the creations to which he has given shape, though only partially, and preserved for posterity in his notes and works of art.

Leonardo's diatribes against the spirit-seers, necromancers and such-like humbugs in the sphere of quasi-religion, are also noteworthy as testifying to his scientific spirit and his demand for clearness even in domains which lay outside the boundaries of science proper.

Thus he has on several occasions taken special pains in explaining why the spirit cannot clothe itself in a body of air and move in the air, and why it cannot speak without an instrument through which the air penetrates. And then he exclaims:

> O Mathematicians, throw light on this error. The spirit has not voice, for where there is voice there is a body, and where there is a body there is occupation of space which prevents the eye from seeing things situated beyond this space; consequently this body of itself fills the whole surrounding air, that is by its images.

The supernatural, in fact, has no place in Leonardo's explanation of the world. Only that which according to the test of experience conforms to Nature's laws and modes of operation is recognized as an increment in the artist's and scientist's treasury of wisdom. But all human knowledge is merely relative. "Truth has always been the daughter of time alone," writes the great scientist and investigator, "therefore you do wrong in praising, and still more wrong in blaming things you do not fully understand. Falsehood is so utterly vile

that though it should praise the great works of God, it offends against his divinity; truth is of such excellence that if it praises the meanest things they become ennobled. . . ."

This solicitude for the truth independent of all theories and authorities; this frank striving always to address himself direct to Nature without permitting himself to be influenced either by learned authors or by established artistic models, is one of the most refreshing things in Leonardo's activity both in the sphere of art and in that of science. He has formulated in many different ways his admiration for Nature and her "master artificer." He finds in her the deepest sources of wisdom and the highest models for all kinds of creative activity. None the less he feels himself to be not merely a pupil, but also a rival and a conqueror of Nature: "The painter contends in rivalry and wrestles with Nature." It is the actual secret in the creative process of Nature that impels him to investigation; he desires to understand the inner cause of the phenomenon, for by understanding the cause the effect can be explained and controlled. "In Nature there is no effect without a cause; if you understand the cause, you need no experiment." . . . "Nature never breaks her own law."

"Necessity is the mistress and guide of Nature, the bridle and the eternal law. . . ." Nature always works along the lines of least resistance: "everything is performed by Nature in the shortest possible time and manner." The creative activity of man is, broadly speaking, a reflection of that of Nature. Man must learn to understand Nature in order to perform that consciously which Nature performs of necessity. Man's limitations are a consequence of defective knowledge of Nature's means and mode of working. It must lie in his power to remove them, for what Nature can perform, man must be able to learn.

This tenor of thought comes out strikingly in Leonardo's work on the problem of flying. He goes the way of Nature; in his flying machines he strives to apply the same methods that he has observed in his studies of the wings of birds and bats and their movements in the air. The organs of flying and the movements of flying are only modifications of those employed by man in walking and swimming,—consequently it must be possible for them to be transferred to man in some way or other. In his unwearying study of the flight of birds,

thanks to an amazingly keen power of observation and of fixing rapid movement, Leonardo actually found the solution, in principle, of the problem of flying. However, he was unable to produce the practical instruments which were requisite for a successful utilization of the principles discovered. And this was the history of many of his discoveries and inventions. The final results of lengthy and artistic preparations were repeatedly abandoned of necessity, just when they seemed to be within his grasp, owing to some practical consideration not having been calculated or executed with the necessary care!

* * * *

In several passages Leonardo represents man as a pattern (or a copy) of the world organism. Man is the microcosm which corresponds to the macrocosm. "Man was called by the ancients a world in miniature and certainly this name is well bestowed; for, just as man is composed of earth, water, air and fire, so is likewise the body of the earth. And, as man has in him bones as supports and framework of his flesh, the world has its rocks, the supports of the earth. If man has within him the lake of the blood where the lungs rise and fall in breathing, so likewise the body of the earth has its oceans which also rise and fall in consequence of the world's breathing. Just as the veins proceed from the lake of the blood and ramify over the whole human body, so likewise the world ocean fills the body of the earth with innumerable veins of water. . . ." It is only the sinews that Leonardo misses in the earth's body; they are not required because they are created for the purpose of movement and the world is in constant equipoise. The following reflection also illustrates what Leonardo has called the earth's breathing: "whether the tides are caused by the sun and moon, or whether they are the earth's breathing. How tides differ in different seas and lands."

Singularly enough, Leonardo does not suppose the earth's breathing to be due to the sun, which on another occasion he calls the source of all life. "In the whole universe I do not see any body of higher worth and sublimity than the sun. His light illuminates all the heavenly bodies which are scattered over the universe. All souls proceed from him, because the warmth which is in living creatures comes from the soul, and there exists no other warmth or light in the universe, as I shall show in the fourth book."

Just as the human organism is the instrument of a soul, so likewise the macrocosm is ruled by an earth's soul. "Nothing springs up in a place where there does not exist sentient, nervous, or rational life. Feathers grow on birds and change every year, hairs grow on animals and change every year, grass grows in the fields and leaves on the trees and are renewed every year in great part. So then we may say that the earth has a spirit of growth and that the soil is its flesh.

"Its bones are the successive strata of the rocks which form the mountains. Its muscles are the tufa stone, its blood the springs of its waters; the lake of blood which lies about the heart is the ocean; its breathing is by the increase and decrease of the blood in its pulses, and like unto it in the earth is the flow and ebb of the sea. And the warmth of the spirit of the world is the fire which is spread throughout the earth; and the dwelling-place of its creative spirit is in the fires, which in divers parts of the earth are breathed out in hot springs and sulphur mines and in volcanoes, such as Mount Ætna in Sicily, and many other places."

A rhythmic alternation belongs to all life; it may be seen in man's breathing as well as in that of the earth and the water. The development takes place in a cycle. Leonardo shows this in different domains of nature. To be sure his reflections on these subjects are rather vague and contradictory, but it seems incontestable that Leonardo, for some time at any rate, considered the earth as a life entity with similar organs and course of development to the animal man, ruled, like him, by a spiritual entity, although of a lower nature (the vegetative soul).[1] The thought may seem naïve in our days but, as we know, it was harboured in somewhat varying forms by the wise men of ancient times, and, in any case, constitutes an interesting testimony to the need of the creative imagination to find in all phenomena a radiation from the same source of life. It is scarcely fair to take these meditations strictly according to the letter; for Leonardo made his notes quite hastily and cursorily without thought of anything like a rounded system. Much of what is most valuable in his reflections seem to be intuitive flashes, rapid combinations of thought, for which he afterwards on mature consideration does not

1 This analogy between the physical universe and the human body has received its most complete development in the writings of Jacopo Leopardi.

find any confirmation. To this category, we must reckon also the detached statement *"The sun does not move"*; for it is evident from several of Leonardo's astronomical notes that in the main he conformed to the Ptolemaic system. If he had really been clear about the heliocentric system, he would certainly have mentioned somewhere the movement of the earth around the sun, which, as far as I am aware, is not the case. On the other hand, Leonardo insists in several notes that the earth is not in the centre of the solar system, "nor yet in the central point of the universe, but in the midst of its elements by which it is accompanied, and to a person standing on the moon our earth would appear with the elements of water and so fulfil the same function as the moon does for us."

"You have to show in your account that the earth is a star in the same way as the moon, and in this manner you will prove the nobility of our earth, and then you shall make a treatise on the magnitude of the different stars according to the ancient authors." It is thus at all events clear that Leonardo regarded the earth as one of the numerous stars of the universe, a spherical body which moves around its axis and whose light is reflected from the sun as in the case of the moon. He opens up the cosmical vista of eternity and inserts our little planet in its relative position to the other astral organisms of the universe. This in itself constitutes an enormous advance over the views which were then current with regard to the universe, its life and movement. "Force has its origin in spiritual movement," writes Leonardo, "it is this movement which flows through the limbs of sentient beings, producing by means of the muscles and the sinews the mechanical movements, and from the same immeasurable source streams forth the force which determines the movements of the heavenly bodies."

III

"You, O man, who in this work of mine would discern the marvellous works of Nature, if you think it would be a criminal thing to destroy it, reflect then how much more criminal it is to take the life of a man. The fabric of the human body seems to you marvellous, but yet it is nothing in comparison with the soul that informs that structure. Be it what it may, it is in truth a divine power which is

effused into Nature's works. See then that your wrath or your animosity do not destroy a life such as this. . . .

"The soul cannot perish when the body decays; the soul is to the body what the wind that brings forth the tones is to the organ; if a pipe is spoilt no good effect can be produced. . . . The soul desires to be with its body because it cannot learn to know or perform anything without the instrument of the body."

In the light of utterances like these, in which the reciprocal relation of the soul and the body,—the function of the latter as an instrument to the former,—is accentuated, it is easier to understand the remarkable dictum: "To design is the task of the master, to execute servant's work" (L'ordinaire e opera signorile, l'operare e atto servile). This dictum does not refer to any definite technical or artistic work, but is in the nature of a philosophical maxim, which above all serves to define the different kinds of activity proper to the different aspects of man's nature.

The creative artist in Leonardo can with better warrant than in most cases be likened to the soul, the ruler, whose function it is to determine and organize; for his artistic activity does not consist in the reproduction or the reinterpretation of traditional subjects in the manner of the virtuoso, but in each separate case involves an independent act of creation by which the spiritual realities vividly present to his imagination find their expression. The true act of creation is the spiritual activity. When the image in his imagination has been crystallized and perhaps caught in a few sketches, the artist's genius has attained the vent and expression which he needed. The execution in detail, the all-round completion of the work was quite another matter; it often involved lengthy technical and scientific investigations and experiments. It was "servant's work," whether executed by the artist's own hands or with the aid of pupils; and a disheartening amount of what was created in imagination never was carried to the point of execution just because the artist had not sufficient interest in "servant's work."

Other circumstances as well, external violence and adverse conditions, as we have seen, contributed to frustrate many of Leonardo's noblest artistic plans. He himself had witnessed works of magnificent design thrown to the winds and the results of years of toil destroyed by human hands or by mechanical causes. But this evoked

neither complaint nor despair in the artist. He only retired deeper and deeper within himself, and mantled himself in a more and more impenetrable veil of patience; for "patience is to wrongs what clothes are to cold; if you multiply them as the cold increases it will have no power to hurt you. In like manner, increase your patience when you meet with wrongs, and they will then be powerless to wound you." Serenity of mind must be maintained under all circumstances. Struggles of soul are fought out in the depths, they hardly reach to the surface to ruffle it.

The outward balance and harmony which characterize throughout Leonardo's philosophical reflections as well as his art are highly impressive. They are attended by a monumental dignity and authority which command our homage. Even those who are least in sympathy with Leonardo's art and view of life are bound to admit that all in that art and in that life is so well balanced and completely fashioned that it seems to be the fruit of the gradual formative process of generations. In his personality and in his work Leonardo appears to balance and express phases and tendencies which were otherwise distributed over several epochs. The universal compass of his mind is paralleled by the equipoise of his nature; his capacity, like the sea, to receive into itself all rivers without its calm being thereby disturbed.

It should perhaps be pointed out at once that balance is not equivalent to indifference. No one was less indifferent than Leonardo to the variegated phenomena of nature and human life. Few artists have possessed such a capacity for entering into the ideas and feelings of other men, or have so unflaggingly striven to understand and express the innermost emotions in beings of different kinds. He was engaged for several years in studying and interpreting the expression in one face, and he left no means untried to coax the secrets of the soul up to the surface. Mona Lisa he entertained with music and singing; the grotesque peasants, according to Lomazzo, he regaled with junket and absurd stories in order to entice them to disclose unreservedly their innermost nature. He tried to avoid falling into the habit, which he considered characteristic of most painters, of depicting only themselves in portraying others, but rather to reflect faithfully, like an inner mirror of the soul, the different individual natures his art is called upon to delineate. His work, even if nothing

more than a hasty drawing, contains at least a flash of life and the soul of the motive, something to indicate that the artist has seen beyond the outward semblance.

According to Leonardo's maxims, a good painter has not merely to render the outer man but also his emotions. The external form is not difficult to reproduce, he says; that one can easily learn by rules and by dint of assiduous practice; but the rendering of the inner man and his moods is a matter which makes the very greatest demands on the artist's susceptibility, his life, and his method of working. Leonardo has given exact rules for all these matters in his "Treatise on Painting." He has laid down how the artist ought to live when he is engaged on his "subtle speculations," how he ought to work, how he ought to employ his leisure time, and how he ought never to neglect to observe people in different situations, or fail of endeavouring to understand the connection between their outer demeanour and their inner motives. It will not do to attempt to make a dramatically and psychologically expressive composition with the aid of models set up expressly for the purpose, for these will always be more or less unnatural and stiff. The painter must in actual life observe the situation or the elements of which it consists; he must inwardly feel and understand its real significance. Leonardo endeavoured to apply this rule of life himself and in so doing learnt that "Where there is most power of feeling, there of martyrs is the greatest martyr."

Balance is not the equivalent of indifference. Calmness is not coldness. It is in the most tranquil water that objects are most clearly reflected. It is when the mind is not ruffled or agitated by personal passions that it best renders the impulses of the soul. The artist must not allow either external or internal circumstances to disturb his composure; this will be easiest for him when he is least influenced by others. "If you are alone, you belong entirely to yourself, but if you are accompanied even by one companion, you belong only half to yourself—and the more this is so, the more clinging he is. And if you persist in serving two masters, relinquishing sometimes social life and sometimes your artistic contemplations, . . . then I tell you that you will not succeed."

No demands that can be made on the artist are too great, for it is his mission consciously to represent the creative force which is manifested in Nature in consequence of intrinsic necessity. His

activity at bottom conforms to the same law as that of Nature. It is the privilege of the artist intuitively to perceive and understand what the scientist gropes his way to by degrees and proves by experiment. But he attains this clearness of perception and knowledge only if he keeps his mind pure, his imagination free from disturbing influences and is not absorbed by love of money or other advantages.

Just as ideal painting, according to Leonardo's view, is the greatest of all sciences and arts, so must its exponent be the best and wisest of men. "A man who despises painting, loves neither philosophy nor Nature," Leonardo writes. In other words, those who would exercise aright the sublime art of painting must understand both philosophy and Nature. The artistic calling is not a gift which falls from heaven and serves as a diversion to those who exercise it; it postulates and exacts life and knowledge, love and work.

* * * *

Leonardo's ethics, as manifested both in his life and in his writings, aim above all at self-control. "One cannot possess any greater or any less dominion than that over oneself. . . . Obstacles cannot bend me. Every obstacle yields to effort. . . . He who fixes his course to a star changes not."

Such utterances of character and strength of will do not usually ring from the lips of artists, still less are they indorsed by their lives, in which it is precisely the lack of firmness and the incapacity to conquer outward obstacles that often give rise to tragic conflicts. The mirroring equipoise of the soul, however, is only won by self-conquest; the harmony which art strives after should have its counterpart in life, for, at bottom, art is a form of life, spiritual life, brought forth by the imagination, bound and delineated by the work of the hands.

The best regulator of self-control is moderation: "Moderation bridles all vices. Whoso curbs not lustful desires puts himself on a level with the beasts. . . ." "Ermine, die rather than sully thyself. . . ." "Seek counsel of him who well controls himself." "A man who seeks to make himself rich in a day will be hanged within a year." "Pray hold me not in scorn! I am not poor! Poor rather is the man who desires many things!"

Just as little as the striving after equipoise leads to indifference

in life, so little should self-control and moderation lead to any restriction in the development of the possibilities within a man. "Iron rusts from disuse; stagnant water loses its purity and in cold weather becomes frozen; even so does inaction sap the vigour of the mind. Those who do not understand how to appreciate and avail themselves of life's gifts, do not merit them," says Leonardo, and he calls those who live in drowsy ease, without effort and work, "food-channels and dirt-collectors, . . . for to them there exists nothing else in the world, and they do not perform anything useful. . . ."

We cannot evade responsibility for ourselves and our actions:

"Nothing is so swift as the years. He who sows virtue, reaps honour. . . . Avoid studies the fruits of which die with the worker. Do not believe that you will win happiness and honour by heaping up riches: do you not see that treasures in themselves do not procure for those who amass them any honour after death, such as is brought by science (and art)? Such honour is a perpetual witness and reminder of him who has called it into being; for honour is a real daughter and not, like money, a step-daughter of her generator.

"In rivers the water that you touch is the last of that which has flowed away and the first of that which comes; so with the present moment. A well-spent life is long.

"O thou that sleepest, what is sleep? Sleep is an image of death. Oh, why not let your work be such that after death you become an image of immortality as in life you become when sleeping like unto the hapless dead.

". . . As a well-spent day brings happy sleep, so life well used brings happy death."

If Leonardo conceived life with its possibilities, its responsibilities, and course of development in this sublime way, he observed, on the other hand, with amazement, the blindness of men to the forces of nature: "Behold now the hope and the desire to go back to our own home and to return to our former state; how like it is to the moth with the light! And the man who with perpetual longing looks forward with joy to each new spring and each new summer and the new months and the new years, deeming that the things he longs for are ever too slow in coming, does not perceive that he is longing for his own destruction. But this longing is the very quintessence, the

spirit of the elements, which, finding itself imprisoned within the life of the human body, desires continually to return to its source. And I would have you know that this same longing is that quintessence inherent in nature and that man is a type of the world."

Most remarkable in fact is the importance Leonardo ascribes to the soul,—that spiritual entity which constitutes the central force in human life,—an individual "artificer" who fascinates the artist by the manifestations of his activity. Already in the womb it is the soul that fashions the man: "Although human subtlety makes a variety of inventions answering by different means to the same end, it will never devise an invention more beautiful, more simple, and better adapted to its purpose than that of Nature, for in her production nothing is lacking and nothing superfluous. Nature has no countervailing weights when she fashions limbs fitted for movement in the bodies of animals, but puts within them the soul of the body which forms them,—that is the soul of the mother,—which first constructs within the womb the shape of the man, and in due time awakens the soul which is to be its indweller. . . ." "And this is the reason why any wish amounting to intense desire, any fright experienced by the mother or any other violent agitation of soul is felt more powerfully by the child than by the mother; there are many cases in which the child loses its life in consequence."

Leonardo's profound respect and veneration for life are due to the fact that the further he penetrated into its mysteries, the clearer he saw its perfect adaptation of means to end in every sphere. He found organisms transcending the most ingenious mechanical invention, and whose power of movement and action proceeded from a spiritual force, observable in its effects but not to be bound or imitated. Seized with admiration at every fresh discovery revealing Nature's perfect modes of operation, he seems to feel thereat something of the joy and delight of creation, as when he finds the solution of an artistic problem.

This joy of discovery as entirely new realms gradually opened up to the intuitive gaze of the investigator, should be borne in mind in reading Leonardo's theoretical reflections in the "Treatise on Painting."

When for the first time a human mind grasps the connection and laws in the phenomena of nature,—facts for so long unrevealed to

the eye of man,—the discoverer, however practical his bent, would naturally feel enthusiastic over the newly acquired knowledge and strive in every way to vindicate its importance. It is quite possible to understand Leonardo's categorical admonition that all practice must be founded on theory and that the painter must first study science and afterwards practice, without necessarily looking upon him as an incorrigible pedant. He knew only too well from his own experience how difficult it was to execute practical work in the right way, how vague and arbitrary were the methods in his time applied in practice; hence his wish to facilitate the work of his pupils and successors by furnishing them with rules and directions educed from his own practical experience, and founded on a minute study of Nature and her laws.

In short, Leonardo put forward his theory exclusively with a practical aim—to liberate the artist from any sort of abstract painting by receipt—to facilitate methodical work, and to smooth the path by which he himself had been forced to find his way through the wilderness. The motive force was in this as in other cases practical activity; theory was the necessary means, the pioneer. Leonardo writes somewhere that: "mechanics are the paradise of the mathematical sciences because it is there that are reaped the fruits of mathematical studies." Similarly painting is given high rank because it is the glorious fruit of the science of perspective, which includes the laws of seeing, and renders possible a correct rendering of all visible objects. Scientific discoveries assume their real value only when they are put into practice and bear fruit in creative activity.

Leonardo evinced himself strikingly indifferent to the idea of making his theoretical writings accessible to a large circle of interested persons or of securing their preservation. One treatise after another was planned, not limited to sciences connected with painting but also respecting such subjects as mechanics, hydraulics, geology, and botany; but no suggestion is made of an intention to publish any of these works in print. He gave himself no time to sift and arrange his material so as to make it accessible and intelligible to all interested persons. To judge by his utterances in the somewhat overcharged introduction to the "Treatise on Painting," he harboured in general a great contempt for all kinds of activity resulting merely

in words and writings. Of short endurance they but evaporate and decay, whereas thoughts bodied forth in works of art or in other practical inventions live on and carry the name of their creator far down into the ages.

It is only the great prodigal genius who may venture to give voice to such thoughts, only he who feels perfectly unmoved by the judgment of his contemporaries and of posterity. To him the creation of the fancy has such a vividly compelling reality that he does not even see occasion for carrying it out in material form.

Leonardo's continually expanding and deepening knowledge was, however, to him its own reward and a constant source of satisfaction. With its aid he was able to penetrate deeper and deeper into Nature's secrets and feel himself more and more completely their interpreter and master. Through this knowledge he learned to know and love Nature in a far more real and intimate manner than would have been possible from the standpoint of the ordinary artist. "Great love is born of great knowledge of the objects loved. If you do not possess knowledge of them you can love them only a little or perhaps not at all. And if you love them only for the good which you expect to gain from them and not for the sum of their qualities, you are like the dog who wags his tail to anyone who gives him a bone."

What other scientist has ventured to maintain that knowledge is only the premise of love and found reward for his toil in the enhanced sympathy with all that lives? When has the analyzing scientist surrendered to the great warm artist's heart as here? When have all living phenomena, from the human soul down to the tiniest plant, been studied and rendered in a spirit of such intimate sympathy as by Leonardo? It is then hardly too much to assume that the artist's unusually intimate and sympathetic relations with all the phenomena of Nature served him well in his pictorial interpretation of Nature. We must go to the Eastern peoples,—for instance, to Japan,—to find a parallel to the personal sympathy and fellow-feeling which marked Leonardo's relation to Nature. According to contemporary authors Leonardo often had about him a whole collection of different kinds of animals which he trained "with much love and patience." He sometimes bought birds in the market, merely to restore to them their lost liberty. He cherished for these creatures a love and an admiration which were all the greater because these

birds were the only beings who could teach him the most difficult and the most ardently coveted of all arts,—that of moving on wings through the air.

A Florentine explorer compares Leonardo's warm feeling for animals with the veneration he had seen exhibited in a number of Indian tribes toward certain species of animals. Here again Leonardo seems to have formed a splendid exception to his contemporaries; and this is all the easier of comprehension when we consider the indifference and callousness with which the Southern peoples of our day treat animals. Vasari gives several anecdotes which illustrate this attitude, and, as if in explanation of it, adds that all Leonardo's actions were stamped by true nobility of feeling.

This statement has all the greater force as made by an author who was not among Leonardo's personal friends and admirers. It creates a strong impression that the lofty spirit and dignified presence of this man commanded the reverence of all, whether friend or foe. He stood in a way above the ordinary antithesis of love and hatred,—he loved because he knew and understood. Nothing was hateful to him, because he recognized that hatred meant only the lack of deeper knowledge, for "love is the daughter of knowledge, and love is deeper in measure as knowledge is more assured. . . ." "Love conquers all things."

Date Due

11/25
5/14.58
NOV 6 1963

44446

ND
623.L5
S619

AUTHOR

Sirén, O.

TITLE

Leonardo da Vinci.

DATE LOANED	BORROWER'S NAME	DATE RETURNED
	Bindery	✓
10/25/49	Morey	
3/15/58	Bohnhorst	
4/14 '58	TCT Nov	
2-11-59	Sandra Mc	
OCD 19 1960	TCT Nov	
10/23/63	June	

39.60